CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, March 31, 1910.

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RAILWAYS.

(* denotes that this work is advertised in Engineering News.)

BALTIMORE & OHIO.—If a satisfactory agreement can be made with the City Council of Defiance, Ohio, respecting grade crossings, the B. & O. Co. announces its intention to expend $250,000 in Defiance during the summer, according to press reports. The plans include the building of seven new viaducts over streets, eliminating five grade crossings, and the erection of new freight and passenger buildings.

Contract has been awarded to the ROBERT GRACE CO., Cleveland, Ohio, for building an extensive freight terminal at Chicago Junction, Ohio, on the main line of the Chicago division. Estimated cost, $1,500,000.

BESSEMER & LAKE ERIE.—Contract has been awarded to T. A. GILLESPIE & CO., Pittsburg, for the grading and masonry for four miles of second track between Red Raven and Russellton, Pa. This work includes the construction of arches under viaduct No. 12, and filling the same and completing the fill at viaduct No. 13. Estimated cost, $90,000.

CANADA.—Bids will be received until April 1 by the Celtic Brick Co., Ltd., of Prince Albert, Sask., for grading roadbed of railway spur, about three-fourths mile long, from the C. N. Ry. line to the company's brick yard just south of Prince Albert city limits.

CARLTON & COAST.—Contracts will be let in April for building this railway from Carlton, Ore., northwest to Fairdale, Yamhill County, 14 miles. There will be two bridges and several trestles on the line. Chas. E. Ladd is Pres.; W. B. Dennis, Vice-Pres. and Gen. Mgr., 505 Concord Bldg., Portland, Ore. Noted on March 17.

CHARLES CITY & WESTERN.—This company will be chartered in Iowa, with $300,000 capital, to build 20 miles of line from Charles City, Iowa, southwesterly. C. W. Hart is Pres., Charles City.

CHERRYVALE, OKLAHOMA & TEXAS.—Announcement is made that engineers are now in the field making the final and definite location for this line. The plans call for a line from Cherryvale, Kan., southwest towards El Paso, Tex., with a branch south towards Aransas Pass, and another branch south to South McAlester, Okla.; also one from Caney, Kan., southeast towards Fayetteville, Ark. The company will let grading contracts soon. Preliminary surveys are under way from Cherryvale, Kan., southwest towards Mangum, Okla., 235 miles, as well as for a branch from Caney southeast via Vinita, Okla., 78 miles. The first work to be carried out will be on the branch via Vinita. S. M. Porter is Pres., Caney; B. J. Dalton, Ch. Engr., Lawrence, Kan. Previously noted.

CINCINNATI, HAMILTON & DAYTON.—Contract has been awarded to the JOHN B. CARTER CONSTRUCTION CO., Chicago, for track improvements in Ohio to cost about $300,000. The contract calls for the excavation of 1,000,000 cu. yds. of earth and the building of 20,000 yds. of concrete masonry. Noted on March 3.

COLORADO.—The Empire Construction Co., of Greeley, Colo., has let the contracts for repairing the break in the dam of the Julesburg reservoir and for rebuilding the 2½ miles of railroad track washed out by the flood, to A. M. DeREMER and JOHN OLSON, of Denver, for $100,000. It will cost $75,000 to rebuild the 250 feet of dam and $25,000 to replace the railroad bed.

CRYSTAL LAKE & UVALDE.—Company has applied to the Texas Railroad Commission for authority to issue bonds at the rate of $15,000 per mile. This company recently completed its road from Uvalde, Tex., where it connects with the Galveston, Harrisburg & San Antonio Ry., south to Crystal City, 41 miles. A. R. Ponder is Gen. Mgr., Uvalde.

GRAND TRUNK PACIFIC.—Contract has been let to J. D. McARTHUR, Winnipeg, Man., for completing the remaining 135 miles on the Tofield-Calgary branch, in Alberta. A contract has also been given to the same contractor for completing the Melville-Regina branch from Bacarres, Sask., southwest to Regina, about 60 miles.

Contract has been awarded to RIGBY-HYLAND & PLUMMER for the extension of the Yorktown, Sask., branch north to Canora, about 30 miles. It is planned to complete this work during 1910.

INTERCOLONIAL RY.—Bids were received by A. W. Campbell, Chairman, Government Railways Managing Boardfl Ottawa, Ont., on March 15, for the construction of a line of railways between George's River and Sydney Mines, N. S., a distance of 9.09 miles. Contract has been awarded to A. KIRK, Antigonish, N. S. Noted on March 3.

KANSAS CITY, MEXICO & ORIENT.—Luther T. Ellsworth, U. S. Consul at Ciudad Porfirio Diaz, Mexico, states that the Kansas City, Mexico & Orient Railway Co. is arranging to build a branch line from San Angelo to Del Rio, Tex., where it will bridge the Rio Grande River and traverse the Mexican district of Las Vacas, where there are several irrigation systems, and finally intersect with the National Railways of Mexico at Sabinas. The company will need various supplies. C. H. Webster is Ch. Engr., Sweetwater, Tex. As noted officially on March 10, "contract has been let to ROACH & STANSELL, of Memphis, Tenn., for building a 45-mile section between San Angelo and Eldorado, on the proposed extension to be built from San Angelo to Del Rio, Tex., via Eldorado, a total of 170 miles."

LEHIGH VALLEY R. R.—Concerning the statement that this company plans to tunnel Bear Mountain at Mauch Chunk, Pa., at a cost of $1,000,000, this company, according to press reports, "has decided on another improvement in that vicinity that will cost even more. Its engineers have completed a survey for a proposed coal-carrying line, to start at Porter House and extend east through Buck Mountain and Briar Patch to Drifton Junction, where a bridge will span the Lehigh River. When completed this will be used to haul to the main line a large proportion of the coal mined in the Hazleton region, which is now sent to Market over the Black Creek branch. That line has heavy grades and has been the scene of many derailments. The engineers figure that the expenditure of $1,200,000 for the new branch is justified by the saving that will be effected through its ability to accommodate larger trains at a greater saving in cost of operation." Noted on March 3.

OREGON R. R. & NAVIGATION CO.—It is stated that contracts have not yet been let for work to be carried out on a change of line between Yoakum, Ore., and Pendleton, 13 miles. The work will be heavy, with several channel changes of the Umatilla River. There will be three steel bridges, each with two 150-ft. spans, and one tunnel 500 ft. long. Noted on Jan. 13.

SAN ANTONIO, RIO GRANDE & TAMPICO.—Contract for grading has been awarded to W. O. ROBERTSON, San Antonio, Tex., and work is now under way from San Antonio southwest. This company was organized to build from San Antonio southwesterly to a point in La Salle County, about 90 miles, as noted on Feb. 24. THE HARRISON ENGINEERING CO., 42 E. 23d St., New York, has the general engineering contract. G. W. Nock is Ch. Engr., San Antonio.

SAVANNAH, AUGUSTA & NORTHERN.—This railroad, of which 25 miles have been completed and 20 miles are under construction, has been sold for $250,000 to W. J. Oliver, of Knoxville, Tenn., a contractor, who held a claim for $286,516, and who will now complete the line.

TEMPLE NORTHWESTERN.—Chartered in Texas with $100,000 capital. Construction has been started by COLLUM & HOWARD, of Temple. The proposed line is from Temple 100 miles to Comanche, Tex. The incorporators are W. J. McDaniel, Pres. and Gen. Mgr.; H. W. Peck, First Vice-Pres. and General Attorney; J. B. Grigsby, Second Vice-Pres., all of Dallas, Tex.; P. L. Downs, of Temple, Tex., Treas.; and S. P. Sadler, of Gatesville, Tex.; W. B. Ferguson, of Waxahachie, J. W. Bird and D. J. Grigsby, of Dallas, A. F. Bentley, J. A. Cole and George E. Wilcox, all of Temple, Tex.

ELECTRIC RAILWAYS.

POULTNEY, VT.—The Trustees have granted the Rutland Railway, Light & Power Co. the right-of-way necessary to build an electric railway in Poultney. This is part of a plan to build a 23-mile extension from Rutland to Lake St. Catherine, it is stated. J. Loftus is Ch. Engr., Rutland, Vt. Noted on Feb 10.

CAMDEN, N. J.—The Camden & Trenton Railway Co., operating between Trenton and Camden, 31 miles, has been sold at a receiver's sale in the United States Circuit Court for $675,000. The only bid was made by Henry C. Thompson, Jr., Land Title Bldg., Philadelphia. The sale includes all the property of the company.

BEAVER FALLS, PA.—The Beaver Falls Council has been notified that the directors of the New Castle & Beaver Valley Street Railway Co. had accepted the ordinance passed by Council granting a right-of-way through the town. It provides for construction to begin in six months, and passengers to be carried in 18 months.

LEECHBURG, PA.—The Pittsburg & Allegheny Valley Ry. Co. has been purchased by Geo. M. Hosack, Atty., Park Bldg., Pittsburg. This line connects Apollo, Vandergrift, Hyde Park and Leechburg, and is about nine miles long. An extension will be built to New Kensington.

SLIPPERY ROCK, PA.—Surveys between Butler and Grove City, via Slippery Rock, have been made, it is stated, by the Pittsburg, Butler, Slippery Rock and Grove City Ry. Co. W. C. Thompson, of Butler, Pa., is Pres.; Dr. W. C. McCandless, Butler, is Treas. Fully noted on Feb. 10.

ELLICOTT CITY, MD.—Harold Hardinge, Frank O. Rappanier, James Booker Clark and James Clark, all of Ellicott City, have organized the Maryland & Washington Traction Co., which plans to build a line from Ellicott City to Laurel, Md., about twelve miles, connecting the lines of the United Railways & Electric Co., of Baltimore, Md., and the Washington Railway & Electric Co., of Washington, D. C.

CLARKSBURG, W. VA.—S. B. Miller, Ch. Engr., of the Fairmount & Clarksburg Traction Co., Fairmount, informs us that preliminary investigation only is being made on the proposed Clarksburg-Weston extension. Noted on Feb. 24.

MT. AIRY, N. C.—Francis Jegiers has secured a franchise, it is stated, to construct an electric railway on Main St., in Mt. Airy. It is proposed to build a 75-mile electric railway from Leadville to Mt. Airy.

RUTHERFORDTON, N. C.—The Isothermal Traction Co. plans to commence construction soon on its projected electric railway between Rutherfordton and Gastonia, via Dallas, Cherryville, Waco, Stubbs, Shelby, Boiling Springs, Cliffside, Henrietta, Caroleen and Rutherfordton, 50 miles. Capital stock, $100,000, to be increased to $3,000,000. Three power stations will be located on Broad River and an amusement park will be built at Chimneyrock. Power will be furnished for lighting. K. S. Finch, Charlotte, Pres. and Gen. Mgr.; John C. Mills, Rutherfordton, Vice-Pres.; J. F. Flack, Rutherfordton, Secy. and Treas. Noted on March 17 and March 3.

ATLANTA, GA.—The Atlanta & Northeastern R. R. Co. has plans under way, it is reported, to begin construction soon on its proposed electric railway from Atlanta to Alpharetta and Cumming, Ga., 42 miles, with a branch to Creighton from Alpharetta, 18 miles. The incorporators are: J. P. Brooke, of Alpharetta, Ga., Pres.; R. P. Jones, Vice-Pres.; J. L. Murphy, Secy., both of Atlanta; J. I. Tinsley, C. L. Harris, F. Carter Tate, and others.

NASHVILLE, TENN.—The Nashville & Adairville Ry. Co., recently chartered, has been granted an amendment to its charter giving it the right to extend its proposed railway into Kentucky and connect at Owensboro, Ky., with the line of the Illinois Central Electric Ry. Co., of Canton, Ill. Noted fully on Jan. 20.

MEMPHIS, TENN.—The Tennessee Traction Co. has surveys under way for its proposed railway from Memphis to Jackson and Nashville, a distance of 210 miles. Right-of-way is partly obtained. Geo. E. Bushnell is Gen. Mgr. and Ch. Engr., Memphis. Noted on Nov. 11 and Dec. 9, 1909.

GALLATIN, TENN.—The Gallatin & Suburban Ry. Co. has amended its charter, to build an interurban railway from Gallatin to Nashville, and has changed its name to the Grand Belt Interurban Railway Co. The company will operate ferries on the Cumberland River. C. H. Fidler, Gallatin, Tenn., is the promoter. Noted on Nov. 4, 1909.

COVINGTON, KY.—The Covington & Big Bone Ry. Co. has filed amended articles of incorporation changing its name to the Covington, Big Bone & Carrollton R. R. Co. The capital stock is increased from $100,000 to $250,000. As noted on Nov. 18, 1909, the incorporators are M. J. Crouch, J. J. Weaver, J. W. Kennedy, Orlando P. Schmidt, R. S. Holmes, Louis Fritz, William Riedlin, Joseph Feltman and A. W. Koch, all of Covington.

*ASHTABULA, OHIO.—Bids will be received until April 8th for the construction of ten miles of electric railway by the Ashtabula Electric St. Ry. Co. Profile, specifications, and any other necessary information can be obtained at the office of the Ashtabula Electric St. Ry. Co., Haskell Bldg., Ashtabula, Ohio.

CINCINNATI, OHIO.—Samuel F. George, Pres. of the Cincinnati, Dayton & Fort Wayne Ry. Co., Dayton, advises us that surveys have been made and right-of-way secured for its proposed line which will connect Cincinnati and Dayton, Ohio, with Fort Wayne, Ind. It will be about 194 miles long. Capital is partly obtained. No contracts have been let. W. S. Smith is Ch. Engr., Toledo, Ohio. Noted on Feb. 24.

FOSTORIA, OHIO.—The Fostoria, Napoleon & Defiance Ry. Co. is ready to begin construction work on its line this spring. Right-of-way is mostly secured and franchises have been granted to the company in all the principal towns through which the road will pass. The officers are: Pres., Charles A. Bliss; Vice-Pres., G. H. Yesbera; Secy., Rufus T. Betts; Treas., W. S. Reece. Directors: Charles A. Bliss, W. S. Reece, R. T. Betts, G. H. Yesbera and George Schrock. All of the officers and directors, with the exception of Mr. Reece, whose home is in Bowling Green, reside in Toledo.

WARSAW, IND.—The Winona Interurban Ry. Co. will build a 14-mile extension from Bremen. R. M. Murray is Ch. Engr., Warsaw.

EVANSVILLE, IND.—The Evansville & Southern Indiana Traction Co., it is reported, will spend about $60,000 during the coming year on improvements on the lines in the city limits. F. M. Durbin is Gen. Mgr., Evansville.

MONTICELLO, IND.—The Indiana Northwestern Traction Co. will let contracts this spring for building its line between Rensselaer and Monticello. G. A. H. Shiedler is Pres., Monticello. Noted on Feb. 3.

BLUFFTON, IND.—The Bluffton, Geneva & Celina Traction Co. will begin construction this spring on its proposed line, which will connect Bluffton, Ind., and Celina, Ohio, with Vera Cruz, Linngrove, Geneva, New Corydon, Ind., and Dublin, Ohio. Surveys have been completed from Bluffton to Geneva, 18½ miles, and the remainder of the route from Bluffton to Geneva, 21½ miles, is now being surveyed. Grading and overhead work have been completed from Bluffton to Geneva. Eleven bridges will be built, including one across the Wabash River. L. C. Justus, Bluffton, is Pres.; Fred Davenport, Bluffton, Ch. Engr.

TERRE HAUTE, IND.—Surveys will begin soon for an electric line from Terre Haute to Cairo, Ill., according to an announcement made by Allen G. Russell, Ch. Engr. of the Illinois Oil & Coal Belt Ry. Co. The proposed line will reach Cairo by way of Robinson, Olney, Fairfield and McLeansboro, Ill. It is thought that the construction work will commence about July 1. The new electric line will be known as the Illinois Oil & Coal Belt Ry., and the head offices will be at McLeansboro, Ill. At a recent meeting of the directors of the road held at Flora, Ill., the following officers were elected: Gen. James R. Campbell, of McLeansboro, Pres.; Joseph B. Crowley, of Robinson, Vice-Pres.; Isaac H. Webb, of McLeansboro, Secy.; J. H. Lane, of McLeansboro, Treas.; Boggs & Boggs, of Fairfield, General Counsel and Solicitors; Allen G. Russell, of McLeansboro, Ch. Engr., and C. F. Knowlton, of Portage, Wis., right-of-way and franchise officer. The WESTERN INDIANA CONSTRUCTION CO., 6 Sherman St., Chicago, which was organized for the purpose of building the road from Terre Haute to Cairo, is at present building an electric line from Janesville, Wis., to Merrell, Wis. Noted on March 17, under McLeansboro, Ill.

OWOSSO, MICH.—At a special election recently held in Owosso, the Lansing & Northeastern Electric Ry. Co., of Lansing, was voted a franchise to build an electric railway in Owosso. This project was fully noted on March 24. T. W. Atwood, Morrice, Mich., is Pres.; Kirke Lathrop, Detroit, Secy. and Treas.; William White, Morrice, Purchasing Agent; J. J. Martindale, Jackson, Elec. Engr.; W. J. Sullivan, Morrice, Ch. Engr.

MURPHYSBORO, ILL.—The Murphysboro & Southern Illinois Ry. Co. will soon let contracts for building 70 miles of single track to connect Murphysboro with Carbondale, Herrin, Duquoin, Carterville and Shawneetown. C. H. Clay is Gen. Mgr.

WATERLOO, IOWA.—The Waterloo, Cedar Falls & Northern Ry. Co. plans to build extensions to its line this summer. A first mortgage and trust deed for $6,000,000 has been filed for record with the County Recorder by the Waterloo, Cedar Falls & Northern Ry. Co. C. D. Cass is Gen. Mgr.

SALADO, TEX.—Business men and citizens of Salado are promoting a proposition to construct an interurban electric railway between this place and Temple, a distance of 14 miles. Maclin Robertson, of Salado, is interested.

VICTORIA, TEX.—A syndicate of local men, consisting of J. H. Hexter, F. B. Lander, J. N. Fagan, T. A. Setterle and A. A. Setterle, has applied to the City Council of Victoria for a franchise over the principal streets for the construction and operation of a street railway system. It is stipulated in the application that the cars shall be propelled either by electricity or gasoline motors.

BRYAN, TEX.—The Bryan & College Interurban Ry. Co. has been granted a charter. It has a capital stock of $20,000 and its principal office is at Bryan. The company is building an interurban railway between Bryan and the State Agricultural and Mechanical College, at College, 6½ miles. The grade for the line is finished and track laying is in progress. The cars will be operated by gasoline motors. J. W. Doremus, of Bryan, is interested.

SAN BENITO, TEX.—Sam. A. Robertson, of San Benito, the engineer and contractor who is at the head of the project to build an extensive system of interurban gasoline motor railway radiating from this place, has let the contract for the grading, bridging and track laying to the HIDALGO CONSTRUCTION CO. Construction work has already commenced. The plans call for the building of more than 50 miles of railway. The system will be used primarily to afford transportation facilities for the sugar cane plantations and extensive truck gardens of this part of the lower Rio Grande Valley. It will also do a passenger business and will connect San Benito with a number of other towns of the valley. The towns and land owners of this section subscribed bonuses in aid of the project.

HOUSTON, TEX.—Contracts have been awarded by the Houston-Galveston Interurban Ry. Co., as follows: To the NORTH AMERICAN DREDGING CO., San Francisco, for building 2½ miles of roadbed on Galveston Island; to the LOUISIANA RED CYPRESS LUMBER CO., Harvey, La., for 100,000 cypress ties. The delivery of these will commence after May 1, continuing until the contract is filled. These will be sufficient to lay about 35 miles. Another contract for 20,000 heart pine ties was let to PICKERING & CO., of Barham, La. These will be delivered immediately and will be chemically treated to resist deteriorating soil and climatological conditions. No especial portion of the line has been assigned for the use of these ties. The right-of-way grading contract, let to J. C. KELSO, of Galveston, is for a distance of 16 miles,

from a point two miles beyond Texas City Junction to Clear Creek; contract for the roadbed between Clear Creek and Brays Bayou, 19 miles, has been let to HARTLY & FORD, of Bay City, Tex. The contract for practically 300,000 feet of creosoted bridge timbers was awarded to the GALVESTON CREOSOTING CO. Altogether material for about 36 bridges and culverts has been contracted for, there being three bridges of considerable proportions, the one at Clear Creek being about 700 ft. long. The other large bridges will be at Brays Bayou and at Dickinson. Mark Lowd is Gen. Mgr. for the Stone & Webster Engineering Corporation, at Houston, Tex.; J. B. Townsend is Supt. of Construction, 410 First National Bank Bldg., Houston, Tex.

CENTRALIA, WASH.—A contract for the construction and equipment of five miles of interurban line for the Twin City Light & Traction Co., connecting Centralia and Chehalis, has been awarded to A. M. HEWES, Monadnock Block, Chicago. He has also the contract for the reconstruction of the company's water and electric lighting plants. The company has been reorganized recently by Guy M. Walker, 15 Wall St., New York, N. Y.

BRANDON, MAN.—The city corporation is seeking Provincial legislative authority to build and operate a municipal street railway system.

REGINA, SASK.—J. W. Decrogady, J. A. Anderson and G. Geddes have been granted a franchise for constructing a street railway here.

VICTORIA, B. C.—The British Columbia Ry. Co. has extensive plans for improving its system here, it is stated. A. T. Goward is Mgr., Victoria.

LIGHT AND POWER PLANTS.

FORT WILLIAMS (Cape Cottage post-office), ME.—We are officially advised that contract for constructing and remodeling overhead lines of the electric lighting system here has been awarded to the A. D. GRANGER CO., 90 West St., at $7,817. Bids were opened on March 15. C. F. Humphreys, Jr., is Constructing Q. M., U. S. A.

BOSTON, MASS.—Bids will be received until April 1 by Guy C. Emerson, Supt. Streets, for furnishing gas and lighting with incandescent mantle burners such streets, parks and alleys as may from time to time be designated by the city for alternative periods of five or ten years, from July 31, 1910. Approximately, 12,000 lamps.

BOSTON, MASS.—Bids are asked until 11 a. m., April 30, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for condenser piping and pumps, erected in the central power plant, Navy Yard, Boston. William M. Smith is Acting Ch. Bureau. Specifications are on file at the office of Engineering News, New York.

ESSEX, MASS.—The Selectmen have awarded contract to the GLOUCESTER ELECTRIC CO., of Gloucester, Mass., for the installation of a complete electric system for street lighting and commercial service for both lamps and motors. It is expected that the new system will be in operation by June 1. E. L. Munger, of Gloucester, is Supt.

UXBRIDGE, MASS.—The Uxbridge & Blackstone St. Ry. Co. has awarded contract to E. D. WARD for the construction of an addition to its power-house here. L. S. Storrs, of Springfield, Mass., is Pres.

SPRINGFIELD, MASS.—Bids will be received until April 6 by the Board of County Commissioners, C. C. Spellman, Chn., for lighting fixtures for the County court-house. Kirkham & Parlett are Archs., 2 Court-house Pl.

HADLEY, MASS.—The citizens have voted to authorize the Selectmen to award contract to the AMHERST GAS CO. for electricity for street lighting for three years.

HOLYOKE, MASS.—Contracts have been awarded to W. H. Snow, Mgr. Municipal Electric and Gas Plant, for the installation of four boilers and stokers, for the municipal electric plant to the BABCOCK & WILCOX CO., 85 Liberty St., New York, at $21,383 and $7,353, respectively.

TURNERS FALLS, MASS.—The ALLIS-CHALMERS CO., of Milwaukee, Wis., has been awarded contract by the Turners Falls Co. for an additional 1,000-KW., 2,300-volt, 3-phase, 60-cycle generator to be direct connected to a water wheel.

JEWETT CITY, CONN.—The town has awarded contract to the NASHAWAUG POWER CO., of Killingly, Conn., to furnish electricity for operating the muncipal electric light system. Contract calls for a minimum of 90,000 KW. at $5,000 per year.

BRISTOL, CONN.—The Bristol & Plainville Tramway Co. has awarded contract to E. A. EVALINE & CO., of New Britain, Conn., for the extension of the gas mains from the gas plant in East Bristol through Forestville and the streets of Plainville.

BROOKLYN, N. Y.—The Brooklyn Rapid Transit Co. has asked for bids for about 9,000 KW. equipment in rotaries and transformers for use in its substations. Contract for this apparatus will soon be let.

*FORT TERRY, N. Y.—Bids are asked until 10 a. m., April 30, by Capt. F. T. Arnold, Constructing Q. M., U. S. A., New London, Conn., for the construction of electric light and power plant and electric lighting system; also for minor alterations and furnishing and installing a new boiler in pumping plant at Fort Terry.

LONG ISLAND CITY (L. I.), N. Y.—Bids are asked by Lawrence Gresser, Pres. Boro. of Queens, until 11 a. m., April 12, for all material and labor required for furnishing and installing electric, combination and gas lighting fixtures in the Queens County Court House, Long Island City, Boro. of Queens.

LONGPORT, N. J.—Bids are asked until 11 a. m., April 2, by the Borough Clerk for furnishing and installing complete electric light and gas producer power equipment, pole lines, etc., in the borough.

CONWAY, PA.—The management of the Pennsylvania Lines west of Pittsburg has awarded contracts to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for new electrical equipment for the plant at Conway, which supplies electricity for operating the shops in this place and for railway signal work. New machinery includes two 750-KW., 2,300-volt, 3-phase, 60-cycle, 3,600- r.p.m., turbo-generator sets; two exciter units, one a 25-KW., 120-volt, 260-r.p.m., direct-current generator coupled to an engine, the other a 25-KW., 125-volt generator direct connected to a 3-phase, 60-cycle, 2,300-volt, 900-r.p.m. synchronous motor. This motor is rated at 150 KW. and, besides driving the exciter, will serve as an electrical condenser; two 12-KW., fly-wheel type motor-generator sets, each consisting of a 12-KW., 600-volt, shunt-wound generator direct connected to a 220-volt, 1,720-r.p.m. induction motor.

CAMBRIDGE SPRINGS, PA.—The Borough Council has awarded contract for the installation of an electric light plant to the ERIE CO., of Erie, Pa.

PITTSBURG, PA.—Contracts have been awarded by the Pittsburg Railways Co. to the PITTSBURG VALVE FOUNDRY & CONSTRUCTION CO. for steam pipes for the turbines and generators being installed in its power plant at Brunots Island. Estimated cost, about $50,000. Extensions and improvements are being made to the plant at Brunots Island, which will increase the output from 10,000 to 34,000 HP., and which will cost about $600,000. The plant will furnish electricity for lamps and motors throughout the entire system of the company.

Contract for lighting the streets and parks for the coming year has been awarded to the ALLEGHENY COUNTY LIGHT CO., at $72 each for arc lamps served by overhead wires and $90 per year for arc lamps with underground sevice, and $26 each per year for tungsten lamps. The SUNLIGHT CO. has received contract for gas and gasoline lamps at $25 each per year.

ALTOONA, PA.—The city has awarded contract to the PENN CENTRAL LIGHT & POWER CO. for lighting the streets. The contract requires the lighting company to furnish street illumination for the city for ten years, beginning April 4. It is specified that the present lamps must be replaced with the system known as the metallic flame lights. Each lamp must be illuminated on an average of 4,000 hours each year. The company is required to change at least 125 lamps to the metallic flame system within the next six months.

AUGUSTA, GA.—Work will soon commence upon the construction of the proposed hydro-electric power plant of the Twin City Power Co., located on the Savannah River, about 30 miles from here. The contract for the dam has been awarded to the AMBURSEN HYDRAULIC CONSTRUCTION CO., 176 Federal St., Boston, Mass. It is expected to develop 30,000 HP., which will be transmitted by electricity to Augusta, and Edgefield, S. C.

COLUMBUS, GA.—Plans are being prepared by the Columbus Power Co. for the construction of a hydroelectric power plant on the Chattahoochee River, at Goat Rock, 12½ miles north of here. The dam will be 70 ft. high and 800 ft. long, and the ultimate development will be 24,000 HP. Estimated cost, $1,500,000. The machinery used in construction will be operated by electricity, which will be supplied from the power-house here, and a transmission line will be erected from Columbus to the site of the proposed dam. Electrical energy developed at this plant will be transmitted to Columbus, West Point, Ga., and Opelika, Ala., to be used for industrial purposes. It is reported that the Stone & Webster Corporation, 147 Milk St., Boston, Mass., which controls the Columbus Power Co., has sublet contract for construction of the foundation of the dam to the SULLIVAN MACHINE CO., of Chicago, Ill. John S. Bleecker is Gen. Mgr. Columbus Power Co.

FORT BARRANCAS, FLA.—Bids are asked by the Constructing Quartermaster, U. S. A., until 11 a. m., April 22, for constructing an electric light system here.

OPELIKA, ALA.—Bids will be received by the city until April 15 for furnishing electricity for lighting the city.

NORWOOD (Concinnati post-office), OHIO.—Bids will be received until April 15 by L. H. Gebhart, City Audr., for $18,000 of bonds to be issued for the purpose of improving and extending the electric light plant.

TOLEDO, OHIO.—The Ford Plate Glass Co., of Toledo, has awarded contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for a 2,500-KW., 580-volt, 1,200 r.p.m., 40-cycle, 3-phase alternator direct connected to an Allis-Chalmers turbine receiving steam at 140 lbs. pressure and exhausting into a vacuum of 28 ins., which will be maintained by an Allis-Chalmers type "C" condenser. Excitation will be supplied by a 120-volt direct-current generator connected to the end of the turbine shaft.

INDIANAPOLIS, IND.—The Board of Public Works has awardd contract for electric light fixtues for the new city hall to the SANBORN ELECTRIC CO., of Indianapolis, at $17,245. Rubush & Hunter, of Indianapolis, are Archs.

*SEYMOUR, IND.—Bids will be received at the office of the City Clerk, until noon, April 21, for lighting the streets, and for an exclusive franchise for establishing an electric light and power plant in the city. Plans and specifications may be obtained from the City Clerk, or McMears & Tripp, Consulting Engrs., 710 Majestic Bldg., Indianapolis, on the deposit of $10. John Hauenschild is City Clk.

AMES, IOWA.—Colonel E. G. Pratt, of Chicago, has sold his gas plant franchise here to Tenny Bros., of Newton, who propose to lay gas mains at once.

WICHITA, KAN.—The Kansas City, Mexico & Orient Ry. Co. has awarded contract for the construction of its plant, to include the erection of shops, car shops, power-house, roundhouse and storehouse, to WESTINGHOUSE, CHURCH, KERR & CO., 10 Bridge St., New York. Estimated cost, about $450,000.

ABERDEEN, S. DAK.—A franchise has been granted to Gilbourne Bros. to install a heat and power distributing system here.

LEAD, S. DAK.—The Consolidated Power & Light Co. has been granted a 20-year franchise to construct and operate an electric light plant here.

VALLEY ROCK, MO.—The St. Louis Plate Glass Co. has awarded contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for one 750-KW., 3,600 r.p.m., 2,300-volt, 3-phase, 60-cycle steam turbo-generator, which will receive steam at 130 lbs. pressure and exhaust in a 28-in. vacuum; one type "B" barometric condenser supplied with air pumps and drain pumps; one 14-in. single-stage motor-driven centrifugal pump for supplying condensing water; one 500-KW. synchronous motor generator set; one 22½-KW. induction motor generator exciter set, one 150-HP. induction motor and a 3-panel switchboard.

OKLAHOMA CITY, OKLA.—Plans are being prepared by the Levica Coal, Coke & Power Co. for the construction of a hydro-electric power plant. Estimated cost, about $500,000. T. J. Wood, Oklahoma Bldg., Oklahoma City, is Secy.

ELK CITY, OKLA.—The city is preparing to make extension to the electric light plant. Estimated cost, about $40,000. F. H. Lankshire is City Engineer.

MANITOU, COLO.—The Town Council awarded contract to the PIKE'S PEAK HYDROELECTRIC CO., for lighting the streets of the town for eight years. The new system is to be installed by June 15, and calls for 100 c. p. tungsten lamps, to be placed on the main streets and at intervals near the various parks and pavilions.

CENTRALIA, WASH.—See item under Electric Railways.

PORTLAND, ORE.—The Portland Railway, Light & Power Co., is planning to construct a 6,000-KW. steam power plant and foundations and dam for a 16,000-KW. hydroelectric plant.

McKITTRICK, CAL.—H. A. Stantien has made application to the Supervisors of Kern County for a franchise for a period of 50 years to erect poles and stretch wires for the purpose of conducting and transmitting electricity over and along streets, alleys and avenues, in the town of McKittrick. Bids will be received until 10 a. m., April 9, by the Supervisors for sale of said franchise to the highest bidder. I. L. Hiller, is Clerk, Kern County, Bakersfield.

SAN DIEGO, CAL.—The San Diego Consolidated Gas & Electric Co., it is reported, has decided to extend its electric lighting system to La Jolla and Chula Vista soon. The company is also considering placing its wires underground in the business district.

CORNING, CAL.—The Town Trustees have granted the Sacramento Valley Power Co. franchise to erect and maintain transmission lines in this city for the distribution of electricity.

SACRAMENTO, CAL.—The Great Western Power Co., it is reported awarded contract to the McGILLWRAY CONSTRUCTION CO., for constructing substation on 84th and R Sts. of reinforced concrete, two stories high and with a capacity of 15,000-KW.

LOS ANGELES, CAL.—Bids will be received by C. G. Keyes, Clk., County Supervisors, until April 18, for furnishing and installing one engine and generator set at the county hospital. Plans and specifications are at office of Hudson & Munsell, Stimson Bldg., also in office Board of Supervisors.

FALLON, NEV.—J. B. Daniel, of Wonder, Nev., has secured from the Federal Government a lease on the power site on the Truckee-Carson irrigation canal, 16 miles west of here. It is estimated that about 2,000-HP. can be developed.

WEYBURN, SASK.—See item under Water Supply—Irrigation.

BRIDGES.

HINGHAM, MASS.—Bids are asked until 10 a. m., April 8, by Col. Edward Burr, Corps Engrs., U. S. A., for alterations in the highway bridge and street railway bridge over Weymouth Back River on Lincoln St., Hingham.

SAYBROOK, CONN.—We are officially advised that the Saybrook and Lyme Connecticut River Bridge Commission on March 21 awarded contract for the construction of the substructure of the Saybrook bridge to HOLBROOK, CABOT & ROLLINS CORPORATION, 6 Beacon St., Boston, Mass., the lowest bidder. Edward W. Bush is Ch. Engr.

BRIDGEPORT, CONN.—M. F. McKenna, City Engr., has prepared plans for a reinforced-concrete bridge over the Rooster River on Brooklawn Ave. Estimated cost, $6,000.

NIAGARA FALLS, N. Y.—The lowest bid opened on March 15 for constructing the Fourth St. bridge over Gill Creek was submitted by Carl Sternbrenner, of Niagara Falls, at $3,000. Thomas H. Hogan is City Clk.

LIVINGSTON, N. Y.—The bids received on March 22 by the Town Boards of Livingston and Clermont, Columbia County, for the construction of bridges over the Clavarack Creek and Roeliff Jansen Kill were: Bridge over Clavarack Creek, E. J. Doyle & Co., Albany, N. Y., $7,945; Kennedy & Easton Construction Co., Albany, $8,378; William King and Peter J. Lamb, Watervliet, N. Y., $8,994; Marks Kearney, Hudson, N. Y., and Harry S. Williams, Clermont, N. Y., $9,412; Morris Kantrowitz, Albany, $10,800. For the Roeliff Jansen Kill bridge, U[illegible] Construction Co., Albany, $5,837; Ca[illegible] Bridge Co., Albany, $6,090.

LEONIA, N. Y.—The Bo[illegible] of Chosen Freeholders on March 22 de[illegible] to build a new bridge over the Over[illegible] Creek at Leonia. Ralph D. Earle, Co[illegible] Engr., was authorized to prepare plans [illegible] specifications to be presented at the [illegible] meeting. Estimated cost, $40,000.

*SYRACUSE, N. Y.—Bids [illegible] 1.30 p. m., April 11, by the [illegible] tract and Supply, for construc[illegible] of Con- bridge over Onondaga Creek [illegible] a concrete St. J. J. Halloran is Secy. [illegible] Dickerson

NEWBERRY, S. C.—Bids ar[illegible] Supervisors of Newberry Cou[illegible] 13 for constructing a bridge [illegible] River. Estimated cost, $4,000. [illegible] Saluda

SAVANNAH, GA.—The Ch[illegible] Commissioners have awarded [illegible] County $5,483, to AUSTIN BROS., At[illegible] tract, at constructing steel bridge over [illegible] Ga., for to connect Isle of Hope with [illegible] River Structure will be 108 ft. lon[illegible] Ave. wide. [illegible] 18 ft.

PERRY, FLA.—Taylor Cou[illegible] will construct a 45-ft. steel trestle [illegible] Contract will be awarded on Apri[illegible] John C. Calhoun is Clk.

DECATUR, ALA.—Bridge co[illegible] were awarded on March 16 as follows [illegible] the Court of County Commissioners of Mor[illegible] County: AUSTIN BROS., Atlanta, Ga., [illegible] $2,300, for Norris Mill bridge over West [illegible] Creek, 100-ft. span on concrete abut[illegible]; 12-ft. roadway, capacity, ten tons; sam[illegible] at $4,850, for Flint Creek bridge, 160-ft. sp[illegible] on tubes, 75-ft. approach, 12-ft. roadway, [illegible] city, ten tons.

SHREVEPORT, LA.—Bids will be received by C. G. Rives, City Comptroller, until April 12, extension of date from March 22, for constructing a steel traffic bridge over the Red River at Shreveport. Estimated cost, $300,000. George R. Wilson is City Engr.

LOUISVILLE, KY.—The Kentucky & Indiana Bridge Co. has had plans prepared by J. M. Johnson, Ch. Engr. Louisville Bridge & Iron Co., for double-tracking and reconstruction of bridge across Ohio River, between Louisville and New Albany, Ind. The present piers are to be extended down stream to carry a new superstructure, and a public hearing will be held in the United States Engineer office, 402 Custom-House, Cincinnati, Ohio, on April 6. Maps of locality and plans of proposed reconstruction of bridge are now at United States Engineer offices at 211 Farmers' Bank Bldg., Pittsburg, Pa., 405 Custom House, Cincinnati, and 425 Custom House, Louisville.

CLEVELAND, OHIO.—Bids are asked by the Cuyahoga County Commissioners until 11 a. m., April 23, for bridge work per Report No. 2585, concrete culvert, Coventry Road, East Cleveland Township, and Report No. 2586, concrete culvert, same road, same township. J. F. Goldenbogen is Clk.

CINCINNATI, OHIO.—Frank E. Morris, Bridge Engr., has submitted to the Public Service Director plans and estimates for two viaducts and a bridge. One of the viaducts will cross the C. L. & M. railroad tracks at Burbank St., and will cost $14,850. The other will cross the same tracks at Whittier St., and is estimated to cost about $7,075.

COLUMBUS, OHIO.—Bids will be received by the Board of County Commissioners of Franklin County until April 25 for the erection of a bridge across Alum Creek in Mifflin Township, known as the Matheny bridge; the improvement of the Henderson road from the Columbus and Worthington Pike to the Perry Township line, a distance of 24,000 ft., and an improvement to the north approach of the Sandusky St. bridge. Hugh Lindsay is County Surv. John Scott is Clk. Bd.

RICHMOND, IND.—Bids are asked by the Commissioners of Wayne County until 11 a. m., April 9, for the construction of one steel bridge, one concrete bridge and one concrete culvert. Demas S. Coe is County Audr.

EVANSVILLE, IND.—The VINCENNES BRIDGE CO. has secured contract, at $7,999, for the construction of 24 steel bridges to be built at different points in the county.

FRANKFORT, IND.—Bids are asked until 2 p. m., April 6, by the Clinton County Commissioners for constructing a bridge and making repairs to bridges. C. F. Cromwell is County Audr.

*ANN ARBOR, MICH.—Bids were received by the Board of Public Works on March 9 for the erection complete of a 2-span concrete bridge, each span to be 75 ft. in the clear, with a 20-ft. roadway and one 6-ft. walk, bidders furnishing plans. We are officially advised that contract has been awarded to the HERMAN TAPP CONSTRUCTION CO., of Fort Wayne, Ind., at $7,650, city to furnish cement, estimated at 1,200 bbls. and piling if needed 40 cts. per ft. extra.

*ST. JOSEPH, MICH.—Bids were received on March 16 by the city for the construction of a substructure for a swing bridge on Wayne St. over Morrison Channel and the Michigan Central Ry. tracks; also for timber protection for said draw, and also for a temporary wooden bridge over said channel and railway tracks. Contract has been awarded to G. A. ALLMENDING, of Benton Harbor, Mich., at $18,295. Noted last week.

*ST. JOSEPH, MICH.—The city will receive bids at the office of M. Weber, City Clk., until 2 p. m., April 11, for the construction of the superstructure for a swing bridge on Wayne St. over the Morrison Channel and the Michigan Central Ry. tracks. Plans and specifications for the work will be on file in the office of the City Clerk, St. Joseph, and at the office of W. M. Hughes, Consulting Engr., Postal Telegraph Bldg., Chicago, Ill., after April 1.

COLONA, ILL.—Rock River will be spanned at Colona by a new bridge. This was decided upon by representatives of Henry and Rock Island Counties on March 22. Estimated cost, $50,000.

DANVILLE, ILL.—Bids will be received by the County Commissioners at Court House, Danville, until 2 p. m., April 4, for the construction of a highway bridge in Newel Township. Bids will be received upon both concrete reinforced and steel structure, reinforced structure to be 160 × 16 ft. and steel structure to be 140 × 16 ft. concrete substructure and floor. Plans and specifications on file at the office of Frank Payne, Consulting Engr., Danville.

WAUKESHA, WIS.—W. H. SHONS has secured contract, at $4,480, for the construction of a bridge here.

VERNON, WIS.—The FREEPORT BRIDGE CO., at $4,480, has secured contract for the construction of a new 3-span concrete bridge across the Fox River in Sections 21 and 22, this town. Bridge to be completed by Aug. 10.

CLINTON, IOWA.—Bids are asked until noon, April 4, by the Board of County Supervisors for the construction of steel bridges, concrete bridges, concrete arches, concrete culverts and building and repairing the wooden bridges required by the county for one year. Frank W. Leedham is County Audr.

HUTCHISON, KAN.—Contract has been awarded to HELMERS & EITEL, of Minneapolis, Minn., for the construction of the bridge across Caw Creek in Main St.

ST. LOUIS, MO.—Contract for reconstructing northern portion of the 18th St. bridge, bids opened on March 15, has been awarded as follows: Superstructure to MISSOURI BRIDGE & IRON CO., Fullerton Bldg., at $39,864; substructure, to GEISEL CONSTRUCTION CO., 620 Chestnut St., at $8,945.

DENISON, TEX.—The War Department has approved the plans of the Missouri, Oklahoma & Gulf Ry. for the construction of a bridge across the Red River. J. J. Harrison, Calvin, Okla., is Ch. Engr.

BURKBURNETT, TEX.—G. W. Wigham, of Burkburnett, and R. P. Webb, of Wichita Falls, Tex., have awarded contract to AUSTIN BROS., Dallas, Tex., for the construction of a bridge across the Red River. Cost, $25,000.

MERCURY, TEX.—The WEATHERFORD BRIDGE CO. has secured contract for the construction of a small bridge across the Deep Creek, near here.

KAUFMAN, TEX.—The Kaufman County Commissioners have decided to spend $10,000 for the construction of steel bridges.

ALBUQUERQUE, N. MEX.—Contract for constructing the steel approach to the east end Alameda bridge, bids opened on March 11, has been awarded to MISSOURI VALLEY BRIDGE & IRON CO., of Leavenworth, Kan., at $5,169.

COLFAX, WASH.—The County Commissioners have let contracts to A. VALK, of Pullman, Wash., for two bridges in Whitman County, one across Cooper Lake on South Main St., Colfax, and the other across the South Palousa, on Grand St., Pullman. Both are to be 114 ft. long, a single span steel bridge, with tubular piers and concrete floors. The contract price is $5,998 each. Both bridges must be ready for use not later than July 1.

*SNOHOMISH, WASH.—We are officially advised that contract has been awarded to the AMERICAN PILE DRIVING CO., of Everett, Wash., for the construction of a steel swing span over the Snohomish River here, at $51,924. Bids were opened on March 14. List of bidders noted last week. John F. Birney is County Engr.

DESCHUTES, ORE.—The Oregon Trunk Line, now building from a point on the Columbia River, near the mouth of the Des Chutes River, south into central Oregon, is asking for bids, it is reported, for a number of bridges, the most important of which will be over the Columbia River, the Celilo Canal, the Oregon R. R. & Navigation main line and the Portage R. R. This work will cost between $1,000,000 and $1,500,000. Plans provide for a swing bridge over the canal on seven fixed spans. The bill authorizing the construction of the bridge over the canal has been passed by both houses of Congress and signed by the President. The plans are in the hands of the War Department for approval. There will be three other bridges over the Des Chutes River, one at Horseshoe Bend and another at Oxbow.

HEALDSBURG, CAL.—Bids will be received at the office of the County Clerk until noon, April 7, for the construction of bridges and culverts on the new roads from Healdsburg to Geyser in Washington and Geyser Road District, as per plans and specifications on file with the Board of Supervisors. F. L. Wright is Clk.

LOS ANGELES, CAL.—Four bids for constructing culverts and bridges on Bassett Pomona Road, 15½ miles of which are to be improved, have been received by the Board of Supervisors. The bidders were: Barber Asphalt Co., $28,862; T. W. Young, $18,400; Mercereau Bridge & Construction Co., $22,300; Arthur S. Bent, $22,281.

LODI, CAL.—The Highway Commission has awarded contract for the construction of a bridge over the Mokelune River near here, to the KEATING-BRADFORD CO., at $7,600.

NEEDLES, CAL.—Application has been made by the Atchison, Topeka & Santa Fe Ry. Co. to the War Department, through Lieut. Charles T. Leeds, United States District Engr., for permission to build an additional pier under the Santa Fe bridge across the Colorado River at Needles. The bridge is of the cantilever type, and at present the body of the stream is crossed by a single span. This is 660 ft. between piers, but the increasing weight of engines and trains makes it advisable to put an additional support between the two.

LOS ANGELES, CAL.—Bids are asked by the County Supervisors until April 4 for the construction of a concrete pile trestle bridge in Washington St., near Adams St. C. G. Reyes is Clk.

*PHOENIX, ARIZ.—Bids were received by the Board of Supervisors of Maricopa County on March 16 for the erection of a concrete steel bridge over Salt River, south of Phoenix. We are officially advised that contract has been awarded to the MERCEREAU BRIDGE & CONSTRUCTION CO., Electric Bldg., Los Angeles, Cal., at $99,900. William E. Thomas is Clk. Construction will begin on April 25, and under contract must be completed by Feb. 1, 1911.

BROCKVILLE, ONT.—A by-law to raise $16,000 for six bridges was voted on and carried on March 16.

MORRE, ONT.—Bids are asked until noon, April 6, for concrete abutments and floor for a steel bridge over the Sydenham River between Moore and Sombra. Bids should be addressed to either T. H. Holmes, Colinville, Ont., or Neil McGugan, Wilkesport, Ont.

TORONTO, ONT.—Bids are asked until noon, April 6, by A. J. McGee, Secy.-Treas., Temiskaming & Northern Ontario Ry. Comn., 25 Toronto St., Toronto, for all works required in connection with the construction of abutments to bridge at M. P. 48.91, and all works required in connection with construction of substructure of steel trestle for Wabis River, M. P. 119.13.

SCARBOROUGH, ONT.—Bids will be received at the office of Barber & Young, 57 Adelaide St., East, Toronto, until noon, April 11, for the construction of a 70-ft. reinforced-concrete arch over the Rouge River on the highway between Lots 4 and 5, Concession 3, Township of Scarborough. Plans and specifications may be seen, and all necessary information obtained at the office of Barber & Young.

REGINA, SASK.—We are officially advised that the Government of the Province of Saskatchewan will soon ask for bids for the construction of the reinforced-concrete abutments for a bridge near Arcola, and bids for two small reinforced-concrete bridges near Estevan and Weyburn. Bids will also be called for the construction of reinforced-concrete bridge abutments for about seven other bridges.

MEXICO CITY, MEX.—A concession has been granted to David E. Thompson, Pres. Pan-American R. R. Co., for building an international railroad and wagon bridge across the Scebiate River between Mexico and Guatemala. The bridge will be used primarily to give the Pan-American R. R. an entrance to Guatemala.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

*FORT STRONG (Boston post-office), MASS.—Bids are asked by Capt. A. M. Miller, Constr, Q. M., 263 Summer St., Boston, until 10 a. m., April 18, for the construction, plumbing, heating, electric wiring and fixtures of the following buildings at Fort Strong, Boston Harbor, Mass.; One double set officers' quarters, one double set N. C. O.'s quarters, one quartermaster's storehouse. The date was erroneously given last week as April 10.

*BOSTON, MASS.—Bids are asked until 3 p. m., May 5, by James Knox Taylor, for the construction of the foundation, the basement and first floors for the extension, remodeling, etc., of the U. S. custom-house, Boston, Mass.

LOWELL, MASS.—The Massachusetts Cotton Mills have let a contract to the ABERTHAW CONSTRUCTION CO., 8 Beacon St., Boston, for a reinforced concrete cotton storehouse, to be built between Bridge St. and the Boston & Maine tracks. The building will be 100 × 256 ft., twelve stories high, with flat slab concrete floors. The walls will be partly brick and partly concrete. No woodwork will be used about the building. Owing to the nature of the ground on which the building will rest the structure will be carried on 1,400 concrete piles which will extend down to bed rock. The building is after designs of Lockwood-Greene & Co., Engrs., 93 Federal St., Boston. Work will be begun immediately and rushed to completion in the early fall.

NEW BEDFORD, MASS.—The contract for building the addition to the New Bedford Textile School, north of the present structure, has been awarded to the B. F. SMITH CO., 37 Purchase St., New Bedford, and it is expected that work will be started in a short time. The appropriation for the addition is $65,000. The addition is to be 108 × 117 ft., three stories high and the design employed in the rest of the school will be carried out. The construction will be of brick and limestone. The addition will set 20 ft. to the north of the present structure, with a gateway on the ground, and connected with the main building by a bridge in the second and third floors. The building will have a frontage along Purchase St. of 257 ft. Nat C. Smith is Arch., Merchant Bank Bldg., New Bedford, and his plans call for a building, which will include on the first two floors laboratories, dye rooms, machine shops, class rooms and experimental rooms. On the third floor will be an assembly hall.

PROVIDENCE, R. I.—NORCROSS BROS., Tremont Bldg., Boston, Mass., contractors, has taken out a building permit, for the erection of a building on Cushing St. to be used as a dormitory for students of the Woman's College of Brown University. The builders have started on the excavations. The structure will cost over $100,000 and have about 100 rooms. It will be 50 × 139 ft. and four stories high. Pressed brick will be used as the main building material and the trimmings will be of limestone. The roof will be of slate and the interior will be fitted with every modern convenience. Andrews, Jacques & Rauorel, 50 Congress St., Boston, are Archs.

NEW HAVEN, CONN.—We are offically advised that from a number of dormitory plans submitted in competition the committee in charge of the Wright Memorial, to be erected at Yale University, has selected those prepared by the firm of architects Delano & Aldrich, 4 East 39th St., New York. At a meeting held last fall the Wright Memorial Committee decided upon the erection of a dormitory. The Yale Corporation has granted the Committee permission to erect a dormitory at Elm and High Sts., including the site of Alumni Hall. The accepted plans provide for 130 bedrooms. The building will be about 100 × 100 ft. four stories high, and will cost $225,000. In August the general contract and those for plumbing, heating and electrical work will be let. No special equipment will be required. The building will be fireproof and will be constructed of long meadow stone. The officers of the Wright Memorial Committee are Noah H. Swayne, 2d, Chn.; Cornelius Vanderbilt, Treas.; Louis C. Hay, 60 Broadway, New York, Secy.; and Albert Woodruff Gray, 78 Wall St., New York, Asst. Secy.

TORRINGTON, CONN.—Bids are asked by the Adjutant General, State Capitol, Hartford, Conn., until noon, April 18, for constructing a State Armory here. The plans call for a brick building, 100 × 90 ft., two stories high, granite trimmed, with steel trusses, steam heat and electric lighting.

MERIDEN, CONN.—Bids will be received by Charles M. Williams, Supt., until 11 a. m., April 8, for the construction of a brick gymnasium building in connection with the Connecticut School for Boys. C. S. Palmer is Arch., 4½ West Main St.

NEW YORK, N. Y.—We are officially advised that D'Oench & Yost, Archs., 289 Fourth Ave., have filed plans for the Germania Life Insurance Co., for the proposed 20-story office building to be erected for the company at the northeast corner of Fourth Ave. and 17th St., south of the proposed 20-story building on the site of the old Clarendon Hotel. The building will be the French Renaissance design, with a tall mansard containing the top four floors, and will be of brick and granite, having an avenue frontage of 80 ft., and a frontage of 115 ft. in the street. It will be 281 ft. high, finished with a decorative balcony running along the third story, and massive pillars supporting clustered lamps at the entrance. The building is to cost $1,000,000. The contract has been let to CHARLES T. WILLS, INC., 156 Fifth Ave., New York.

Plans have been filed for three 6-story flathouses, to be erected at the northeast corner of Bradhurst Ave. and 151st St. from designs by Gronenberg & Leuchtag, Archs., 3 West 22d St., for the C. N. & S. A. Construction Co., of which Samuel Augenblick is Pres. The corner building will contain 35 suites,, with ground floor stores, and the two others 41 suites each. The group will cost $200,000.

NEW YORK, N. Y.—Plans have been filed for two 5-story flathouses, to contain 28 and 34 suites, respectively, with ground floor stores, to be built on Tenth Ave., east of Emerson St., for Charles Hensle from designs by Gronenburg & Leuchtag, Archs., 3 West 22d St. Cost, $60,000.

A 5-story flathouse, with 21 suites, having a frontage of 50 ft. is to be built from designs by Neville & Bagge, Archs., 217 West 125th St., at a cost of $50,000, for the Van Orden Construction Co., of which Ruyter Van Orden is Pres. The building will be erected at 184th St., west of Amsterdam Ave.

Plans have been filed for a 6-story warehouse for the Becker Realty Co., Julius Becker, Pres., at the northwest corner of Greenwich and Twelfth Sts., from designs by Schneider & Diffenbach, Archs., 220 Broadway. Cost, $65,000.

Francis H. Kimball, Arch., 71 Broadway, has filed for the O. B. Potter Trust, Empire Bldg., plans for a 12-story and basement commercial building for the Trust, to be erected at the southeast corner of Broadway and Astor Pl., adjoining the original O. B. Potter uptown office building on the Lafayette Pl. corner. The new building will have a Broadway frontage of 98.1 ft., and will replace the two old-fashioned mansard brick buildings on the site. The building will be in the Renaissance style, with facades of decorated limestone at the first three stories, and brick trimmed with terra cotta above. The front will be finished with tall pilasters and arched bays at the top three stories. It is to cost $300,000.

NEW YORK, N. Y.—We are officially advised that additions are to be made immediately to the property of the Bush Terminal Co., in South Brooklyn, as a result of the rapid growth of the industrial colony it has caused. To the series of model loft buildings, Irving T. Bush, Pres., of the company, has arranged to add two more, and general contract for their construction has been let to the TURNER CONSTRUCTION CO., 11 Broadway, New York. All other contracts are yet to be awarded. Each structure will represent an expenditure of approximating $300,000, and, like their predecessors, the buildings will be of reinforced concrete, 700 ft. long and 75 ft. in width, six stories high, and will contain a floor area of 375,000 sq. ft. each.

Plans have been filed for a 12-story loft building, with stores, to be built on the 25-ft. plot at No. 35 West 20th St., at a cost of $80,000, for the Theological Seminary of the Presbyterian Church, Princeton, as owner.

Plans for the proposed barge office adjoining Battery Park in New York have been approved by the acting Secretary of the Treasury. The proposed structure, a part of which has been built, will include a power-house and tower. Space will be provided for office, waiting and baggage rooms. Congress has appropriated $500,000 for the building. James Knox Taylor is Superv. Arch., Treasury Dept., Washington, D. C.

*NEW YORK, N. Y.—Bids are asked by the Board of Water Supply until 11 a. m., April 15, for Contract 74, for the construction of a field office building and horse shed for division and section engineers in the White Plains division of the Catskill aqueduct. The site of the work is about one-half mile east of Elmsford station on the Putnam division of the New York Central & Hudson River R. R., in the town of Greenburg, Westchester County, New York.

Bids are asked by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, until 11 a. m., April 11, (1) for alterations, repairs, etc., at Public Schools Nos. 48, 49, 95, 102, 118, 128, 134, 139 and 140, Boro. of Brooklyn; (2) for alterations, repairs, etc., at Public Schools Nos. 5, 9, 10, 43, 46, 54, 81, 93, 132, 157, 165, 166, 169, 170, 179, 184, 186 and Wadleigh High School, Boro. of Manhattan; (3) for completing and finishing the new fireproof main stairs at Public School No. 46, 156th St. and St. Nicholas Ave., Boro. of Manhattan, in accordance with the original plans and specifications of contract awarded to John Fury, which has been declared abandoned; (4) for furnishing and delivering materials for the use of mechanics (Electrical Division, Building Bureau), in the public schools of the City of New York, in the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond.

The following bids were received on March 21 by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for the general construction, etc., of additions to and alterations in Public School No. 19, on the west side of Keap St., between South Second and Third Sts., Boro. of Brooklyn: George Hilderbrand, $239,500; T. A. Clark Co., $203,000; W. J. Moran, Inc., $205,205; Wills & Marvin, 1170 Broadway, New York, $198,599; Peter Cleary, $206,475; Thos. McKeown, Inc., $203,333; George F. Driscoll, 548 Union St., Brooklyn, N. Y., $193,998; F. T. Nesbit & Co., Inc., $226,073; P. J. Brennan & Son, $269,900; James McArthur, $252,615; John Kennedy & Co., 175 Front St., Brooklyn, N. Y., $198,870; John F. Walsh Const. Co., $209,940; Charles H. Peckworth, $208,431.

SCHENECTADY, N. Y.—We are officially advised that an ordinance has been passed by the Schnectady Common Council authorizing the bonding of the city to the amount of $300,000. The proceeds will be used for the erection of a 12-room school building on Union St.; the erection of a building to be used as an annex to the High School; and for the construction of an additional story on the Albany St. school. All the structures will be fireproof and of brick and concrete. The two complete buildings will be 200 × 200 and 75 × 150 ft., respectively. The matter is now in charge of the Board of Contract and Supply. No architect has been selected. P. A. Douglas is Secy., of Board of Education.

PHILADELPHIA, PA.—MELODY & KEATING, Bailey Bldg., have been granted a permit for the erection of a $122,000 parochial school at the northwest corner of Seventh and York Sts., for St. Edward the Confessor Roman Catholic Church. It will be of stone four stories high, and will measure 68 × 147 ft. Henry D. Dagit, is Arch., 411 Walnut St.

Irwin & Leighton, Franklin Bldg., submitted the lowest bids of $154,740 (work to be finished in 250 days), for the erection of the Columbia Ave. station for the Philadelphia & Reading Ry.

Permits for the erection of houses to be built have been granted Harry V. Williams. In all 219 houses and 14 stores will be erected for Burton C. Simon, 1544 West Passyunk St., at a total cost of $342,700. They will be situated in the vicinity of 20th, Mifflin and McKean Sts.

Estimates are being taken by E. F. Fonder, Land Title Bldg., on the 4-story apartment house, 105 × 145 ft., to be built at the northwest corner of 44th and Walnut Sts., for Meyer Rosenstein from plans by Milligan & Webber, 520 Walnut St. The building will be of brick, will contain 36 suites of six and seven rooms and will cost about $150,000.

ERIE, PA.—We are offically advised that the following bids were received on March 22 for the removal of the present Public School Building No. 7, and the erection of a new building in its place: Baldwin Bros., Erie, $139,723; Henry Shenk Co., Erie, $160,490; Constable Bros. Co., Erie, $99,683; Kirschner Bros., Erie, $92,300; W. J. Flynn is Secy. Bd.

WASHINGTON, PA.—We are officially informed that Mowbray & Uffinger, Archs., 56 Liberty St., New York, have completed plans for a 2-story bank, 60 × 130 ft., to be erected by the Citizens' National Bank, at Washington, Pa. The building will be fireproof, one story high, 60 × 126 ft., of marble construction. It will cost $125,000 and the equipment will cost $50,000. The general contract has been let to A. & S. WILSON CO., 541 Third Ave., Pittsburg, Pa.

HAGERSTOWN, MD.—H. R. Pratt, Chief Engr. of the Western Maryland Ry. Co., Baltimore, Md., has plans for a station to be erected in Hagerstown to cost about $65,000.

BALTIMORE, MD.—Work on the foundation for the $1,000,000 hotel to be built by Dr. Isaac E. Emerson on the old Baltimore & Ohio lot, at the northwest corner of Baltimore and Calvert Sts., is under way. WILLIAM H. PARKER, is the contractor who has charge of the work. The foundation will be 32 ft. below the level of the curb line. As soon as this depth is reached the concrete work will be started. This will begin in about ten days. The building will be completed by June 1, 1911. It will be 15 stories high.

NORFOLK, VA.—The Norfolk & Western and Virginia Southern railroad companies have selected Reed & Stem, Archs., 7 East 42d St., New York, to draw plans for the proposed fireproof union passenger station to be built here. Cost, $2,000,000.

LYNCHBURG, VA.—The contract for the construction of an extension to the U. S. post-office at Lynchburg, has been awarded to J. E. & A. L. FENNOCK, Land Title Bldg. Philadelphia, Pa., except elevators, $126,500; less for omitting clock system, $450; net amount, $125,950.

CHARLESTON, W. VA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., May 4, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring and standard clock system) of an extension, remodeling, etc., to the U. S. post-office and court-house at Charleston.

NEWNAN, GA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., until 3 p. m., April 29, for the construction (including plumbing gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office, Newnan.

MERIDIAN, MISS.—The Mississippi Medical College Faculty has decided to erect a college, with a hospital attached. The new buildings will be erected on the present site, at a cost of between $50,000 and $75,000, and will be ready for occupancy at the opening of the next season.

OTTAWA, OHIO.—Frank L. Packard, Hayden Bldg., have the plans ready for a $200,000 court-house at Ottawa. Plans will be on file at the Builders' Exchange, Columbus.

DELPHOS, OHIO.—McLaughlin & Hulsken, Archs., are preparing plans for a $100,000 school building which will be advertised soon.

ALLIANCE, OHIO.—Richards, McCarty & Bulford, Archs., the Ruggery, of Columbus, are drawing plans and specifications for two school buildings to be erected at Alliance at a combined cost of about $110,000.

*CONNERSVILLE, IND.—The following bids were received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., on March 23, for the construction of the U. S. public building at Connersville, Ind.: Cecil L. Saunders, Clifton Forge, Va., $56,000; Moore & Danners, Kokomo, Ind., $59,757; Christ Kanzler & Son, Evansville, Ind., $59,635,49; M. P. Wells, Witherspoon Bldg., Philadelphia, Pa., $61,515; Bedford Stone Construction Co., Indianapolis, Ind., $54,992; The W. P. Jungelaus Co., Indianapolis, Ind., $62,109; August Ohn, Terre Haute, Ind., $55,500; Harman Bros., Williamsport, Pa., $62,000; James De Vault & Son, Canton, Ohio, $52,466; R. S. Moore & Co., Danville, Ill., $56,981; F. M. Roode & Co., Tipton, Ind., $59,000; Barnes Bros., Manchester, Va., $56,300; Charles Hoertz & Son, Grand Rapids, Mich., $58,543,21.

LOGANSPORT, IND.—Dr. M. A. Jordan is asking for bids for the erection of a 4-story brick annex to the Barnet Hotel.

NEWCASTLE, IND.—H. A. Boomer, Gen. Supt., of the Lake Erie & Western R. R. Co., has made official announcement that bids will be asked in a short time for the erection of a passenger station and a new freight depot at New Castle.

INDIANAPOLIS, IND.—William H. Morrison will receive bids for the construction of an office building for the University Park Association at the corner of Vermont and Pennsylvania Sts. Estimated cost, $50,000. Rubush & Hunter, American Central Life Bldg., are Archs.

Permits have been issued for two automobile garages that are to be erected by Carl G. Fisher, on North Capitol Ave. north of Vermont St. The buildings will cost $19,000 and $83,000, respectively.

Volney T. Malott, 134 East Market St., will soon ask for bids for the erection of a business building, at 312 North Delaware St. The building will be 167½ × 120 ft., with stores on the ground floor.

MOUNT VERNON, IND.—The School Board has awarded a contract for the construction of a central school building to M. M. COLTON, of Indianapolis.

DETROIT, MICH.—E. S. George, 251 Woodward Ave., Detroit, has bought 70 ft. frontage on Woodward Ave., and announces that he will erect a 10-story office and store building.

M. Reichstein, 271 Guion St., Detroit, is taking figures on a 3-story warehouse, 70 × 50 ft., stock brick, Bedford cut stone, composition roof will be used in construction.

VINTON & CO., 120-46 Woodbridge St., Detroit, have been awarded the general contract for the repairs to the building at 10 Woodward Ave., that was partly destroyed by fire some time ago. Sidney T. Miller, 1124 Penobscot Bldg., Detroit, is owner.

Frederick Stearns & Co., F. K. Stearns, Gen. Mgr., Jefferson and Bellevue Aves., Detroit, are letting contracts for a 2-story addition, 45 × 72 ft., to their present warehouse, and fourth story addition, 280 × 45 ft., to their present 3-story building. Stock brick, Bedford cut stone, composition roof and electric fixtures will be used in construction.

The Fisher Body Co., Charles T. Fisher, Secy., 1414-26 St. Antoine St., Detroit, is letting contracts for a 3-story addition, 122 × 70 ft., to their present 2-story building. Stock brick, Bedford cut stone, composition roofing., electric fixtures, etc., will be used in construction.

Allen & Hill, Archs., 711 Gas Bldg., Detroit, have let the following contracts for the proposed apartment building, containing 18 apartments, 3-story and basement, 49 × 114 ft., for F. A. Rather, 697 Trumbull Ave.: Masonry to HORTON & STONER, 313 Euclid Ave.; steam heating to GEORGE L. HAMAN & CO., 675 Michigan Ave.; plumbing to WILLIAM LEWIS, 1163 Brooklyn Ave.

Varney, Winter & Varney, Archs., 58-62 Equity Bldg., Detroit, have let the following contracts for a 4-story and basement hotel: Masonry to J. C. WARD, 1088 14th Ave.; carpentry to JOHN ZIMMERMAN, 1132 Seyburn Ave.

Mildner & Eisen, Archs., 1018 Hammond Bldg., Detroit, have prepared plans and specifications for a theatre building, 100 × 60 ft., and are receiving bids. Pressed brick, composition roof, galvanized iron skylight and cornice and structural iron will be used in construction.

The Board of Trustees of the Children's Free Hospital, Mrs. Frank Crandall, Secy., Farnsworth Ave. and St. Antoine St., Detroit, have decided on additions and alterations to cost $100,000.

Stratton & Baldwin, Archs., 1103 Union Trust Bldg., Detroit, have been commissioned by the Harper General Hospital Trustees to prepare plans and specifications for a hospital building to be built on a site located on Hamilton Boulevard. The Harper General Hospital Association, has been incorporated, capitalized at $2,500,000. J. L. Hudson, Gratiot Ave. and Farmer St., and Otto Kirchner, 80 Griswold St., are Trustees.

Van Leyen & Schilling, Archs., 1117 Union Trust Bldg., Detroit have let the masonry contract to JOHN FINN, Penobscot Bldg., for the Knights of Columbus Hall, 2-story and basement, 87 × 181 ft. Martin E. Galvin, is Grand Knight, 459 Second Ave., Detroit.

The general contract for the Baptist Church, Rev. J. Varnek, Pastor, 270 Linden St., Detroit, has been let to GEORGE R. WETTEL, 986 25th St.

JACKSON, MICH.—Allen & Hill, Archs., 711 Gas Bldg., Detroit, have let general contract to BRAUN & BRAUN, of Jackson, Mich., for the erection of the proposed store building, to have three stories and basement for Cook & Sibler, Jackson, Mich.

LINCOLN, ILL.—The following bids were received by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., on March 21 for the construction of the U. S. post-office at Lincoln, Ill.: Hiram Lloyd Building & Construction Co., Odd Fellows' Bldg., St. Louis, Mo., $59,323; The Conners Bros. Co., Lowell, Mass., $56,000; Northern Construction Co., 421 Milwaukee St., Milwaukee, Wis., $63,000; Charles W. Gindele, 3333 La Salle St., Chicago, Ill., $57,500; William Allen Sons & Co., Peoria, Ill., $63,000.

CHICAGO, ILL.—Plans are about complete for the Rothschild & Co., store building, which will have ten stories, basement and sub-basement, with 380 ft. front on State St. by 145 ft. on Van Buren St. and 45 × 171 ft. on Wabash Ave. It is to be white granite to the third floor and terra-cotta above, and will be erected under the supervision of Holabird & Roche, Archs., Monadnock Bldg., beginning early this spring. The approximate cost of the building will be from $3,000,000 to $3,500,000.

WICHITA, KAN.—We are officially advised that bids were received on March 23, by William Sence, City Clerk, for constructing an auditorium. The Commissioners have accepted the plans drawn by Richards, McCarty & Bulford, The Ruggery, Columbus, Ohio. The maximum cost of the building will be $150,000. The general contract has been let to DIETER & WENZEL CONSTRUCTION CO., of Wichita.

*AUSTIN, MINN.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., May 9, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Austin, Minn.

ALBERT LEA, MINN.—We are officially advised that Chandler & Park, Archs., 400 Main St., Racine, Wis., are preparing plans for the erection of a school building, 165 × 235 ft., estimated to cost $115,000. There will be 14 grade rooms. The building will be of brick and stone construction.

ST. PAUL, MINN.—Gov. A. O. Eberhart will recommend to the legislature which meets this coming winter to construct an administration building here to house the various state commissions and boards. Cost, $300,000.

The contract for the construction of the superstructure of the proposed St. Agnes Roman Catholic Church at Kent and Thomas Sts., have been awarded to LAUER BROS., foot of Chestnut St., city. Plans were prepared by George J. Ries, Union Block, St. Paul. It will be built of cut stone and will be fireproof. Cost, $150,000.

MINNEAPOLIS, MINN.—Plans have been announced by L. S. Donaldson for the erection this year of a $250,000 5-story building at Seventh St., as an addition both to the Glass Block, Sixth and Nicollet Sts., and the Physicians' Building, Seventh and Nicollet Sts. both owned by the L. S. Donaldson Co.

Construction will begin at once, with Aug. 1, set for the completion of the building, which will give the Donaldson company a continuous store from Sixth St. through to Seventh St. In the rear the new building will connect with the Glass Block, on every floor and with the Physicians' building, by covered passageways across the alley. The three buildings will be joined in the basements by a subway system. This part of the work has been started. Nearly all of the excavation is completed on Seventh St. J. L. ROBINSON, 511 Seventh St. south, Minneapolis, has been awarded the contract. The new building will harmonize generally with the Donaldson Physicians' building and the Glass Block. The entire five stories will be used by the company for store purposes. The wall of the Glass Block toward Seventh St. will be taken out to join the various floors of the two buildings. The frontage on Seventh St. will be 61 ft. The new building will be of reinforced concrete construction. The first story will present an exterior of green terra cotta, and the rest will be of white terra cotta, and white enameled brick. The arrangement will allow for many windows, following out the Glass Block idea, and the plans call for daylight exposure three sides. The building will be fireproof.

FREMONT, NEB.—The following bids were received by James Knox Taylor, Superv. Arch., of the Treasury Dept., Washington, D. C., on March 22 for the construction of an extension to the U. S. post-office at Fremont, Neb. General Construction Co., Milwaukee, Wis., $52,887; Northwestern Construction Co., Wahpeton, N. Dak., $48,698.

KEARNEY, NEB.—The contract for the erection of the north wing of the normal school has been let to W. F. CROSSLEY for $49,207, this being the price finally agreed upon after Knutzen Isdell had refused to sign the contract drawn between them and the Board owing to a misunderstanding about the material to be used. The material will be gray pressed brick. The building must be completed by Jan. 1, 1911.

JEFFERSON BARRACKS, MO.—Bids are asked until 11 a. m., April 9, by Capt. Stanley H. Ford, Q. M., for remodeling four stable guard houses into quarters for enlisted men.

*TACOMA, WASH.—Bids are asked until 3 p. m., May 11, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for metal vault shelving for the U. S. post-office, court-house and custom-house at Tacoma.

PORTLAND, ORE.—J. S. Beall, Pres. of the Beall & Co., and L. F. Weaver, Local Mgr., of the Studebaker Co., have purchased from R. Hoyt a quarter block at the southwest corner of East First and East Morrison Sts., upon which they will erect a $75,000 warehouse.

Lazarus, Whitehouse & Fouilhoux, Lumbermen's Bldg., who prepared the plans for the Old People's Home to be built by Mrs. P. J. Mann, at 33d St. and Sandy Road, have awarded the general contract to GARDNER & McLENNAN; plumbing, to WILLIAMS & BEGGS; the wiring to the EVANS-DICKSON CO., the heating to KENDALL HEATING CO., and excavating let to H. REIMERS. Works will be started immediately. Cost $150,000.

SACRAMENTO, CAL.—Work will be started at once on a 5-story and basement building to be erected on K St., between Ninth and Tenth Sts., by George W. Peltier and Alden Anderson. The structure will be erected on the north side of the street on the vacant lot adjoining the Odd Fellows' Temple. The original plans of the building have been modified. Instead of being of concrete, the structure will be of brick. The front will be of pressed brick, with a recess around each brick to produce the same effect as that of the new Palace Hotel in San Francisco. The color of the brick will be either gray or yellow. The building will be called the Annex. The basement will be fitted for a barber shop and baths, the first floor for stores, and the upper four floors for rooms. The building will contain 100 rooms. It will be built by the RANSOME CONCRETE CO. OF CALIFORNIA, San Francisco, Cal. The contract price for the building exclusive of furnishings, is $85,000. The total expenditure when completed and furnished, will be about $175,000.

LOS ANGLES, CAL.—The NATIONAL FIRE PROOFING CO., Central Bldg., Los Angeles, Cal., has the contract, at $50,000, for fireproofing, structural steel, including terra-cotta floors, roofs and partitions, and painting structural iron in floors in the 11-story office building at Sixth and Spring Sts. The Trust & Savings Bank is the owner. Parkinson & Bergstrom are Archs., Security Bldg.

A reinforced concrete fireproof loft building, to be eight stories high, will be started by H. W. Hellman Estate at the corner of Fourth and Los Angeles St., about April 15. Plans for structure, which will cost about $100,000, have been prepared by A. F. Rosenheim, Arch., H. W. Hellman Bldg.

The RICHARDS-NEUSTADT CONSTRUCTION CO., Wright & Callender Bldg., have prepared plans and will erect a 4-story and basement reinforced concrete loft building on South Los Angeles St., for E. H. Skinner. The structure will be 75 × 130 ft., fireproof, and will cost $135,000.

LOS ANGELES, CAL.—Harrison Albright, Arch., Laughlin Bldg., has awarded contract to WEYMOUTH CROWELL, Pacific Electrical Building, for three additional stories to be added to the building being erected at Sixth and Hill Sts., by the Consolidated Realty Bldg. Co. Cost, $125,000.

The Los Angeles Public Market Co. will erect a reinforced concrete loft building for M. A. Newmark Co., wholesale grocers, at Sixth and Alameda Sts. The building will be 140 × 150 ft., five stories high, and will cost $125,000.

BOISE, IDAHO.—W. F. Pierce & Co. will erect a 6-story office building at a cost of $225,000, on Eighth and Bannock Sts. Plans are being drawn by J. E. Tourtellotte & Co., Welland Bldg., Boise.

TORONTO, ONT.—Bids are asked by Darling & Pearson, Archs., 2 Leader Lane, until noon, April 3, for the excavation of basement and foundations of the Main Building, Toronto General Hospital, College St.

WATER-SUPPLY—IRRIGATION.

VINAL HAVEN, ME.—We are officially advised that CHARLES N. TAYLOR, of Wellesly, Mass., has been awarded the contract for furnishing all materials and constructing a complete water system at Vinal Haven for the Vinal Haven Water Co. The system will consist of four miles of 6, 8 and 10-in. c.-i. pipe, steel standpipe 25 ft. in diameter by 85 ft. high, and duplicate pumping machinery. It is estimated there will be about 5,000 cu. yds. of rock excavation.

BOSTON, MASS.—See item under Manufacturing Plants.

BOSTON, MASS.—Bids are asked by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., April 23, for fire protection for buildings Nos. 58, 60, 62 and 79. Specifications are on file at the office of Engineering News, New York.

BOSTON, MASS.—The HERSEY MFG. CO., E and First Sts., Boston, has been awarded contract by the city for supplying 6,350 water meters, at $35,035.

*FORT STRONG (Boston post-office), MASS.—Bids are asked until 10 a. m., April 23, by Capt. A. M. Miller, Constructing Q. M., U. S. A., 263 Summer St., Boston, Mass., for remodeling the water distributing system at Fort Strong.

*NEWTON, MASS.—Bids will be received by the Metropolitan Water and Sewer Board, Boston, Henry H. Sprague, Chn., until 2.30 p. m., April 15, for constructing a pressure tunnel and laying water mains, etc., for the western aqueduct supply main in Newton. Length of pressure tunnel is about 1,900 ft. and 6 ft. 4 ins. in diameter inside the concrete lining. Work consists of laying about 500 ft. of 80-in. steel pipe line covered with concrete on the outside and lined with mortar, and laying about 930 ft. of 60-in. c.-i. pipe line for the Weston aqueduct supply main in Newton. The work also includes about 950 cu. yds. of top soil excavation, 910 cu. yds. of top soil surfacing, 350 cu. yds. of earth excavation and 1,700 cu. yds. of rock excavation in open trench, filling trenches and building embankments with 8,900 cu. yds. of material, crushing 100 cu. yds. of stone, 2,300 cu. yds. of concrete masonry in tunnel and 500 cu. yds. in open trench, 50 cu. yds. of brick masonry and 200 cu. yds. of cement grout in tunnel. Plans for the work may be seen and pamphlets containing further information for bidders, forms of proposal, contract and specifications may be obtained at the office of the Chief Engineer, 1 Ashburton Pl. The printed forms must be used in making proposals. Dexter Brackett is Ch. Engr. W.-W. Advertised last week.

METHUEN, MASS.—The citizens on March 19 voted $35,000 of bonds for extending the water system.

UTICA, N. Y.—The bids received by the State Commission in Lunacy, Albany, on March 23, for the installation of a system of water piping for fire protection for the Utica State Hospital at Utica, N. Y., were: W. B. Armstrong, Albany, $6,490; Howard Joy Co., Syracuse, N. Y., $5,995; Hewson & Co., Utica, $4,398; Nick Camelo, Utica, $3,500; Samuel Bona, Syracuse, N. Y., $3,387; Frank J. Le Valley, Lockport, N. Y., $3,548; C. R. Lewis, Ilion, N. Y., $4,990; John M. Holler, Albany, $4,396. T. E. McGarr is Secy. Comn. F. B. Ware is State Arch.

SPENCERPORT, N. Y.—The citizens voted on March 15 to issue $38,988 of bonds for water-works.

GENEVA, N. Y.—William S. Johnson, 101 Tremont St., Boston, Mass., has been selected to prepare plans for the construction of a filtration plant, larger water mains and a sewage disposal plant.

ELLENVILLE, N. Y.—Bids will be received until April 1 by W. C. Rose, Comr. of Water Board, for the construction of a new reservoir.

NEW YORK, N. Y.—The COFFIN VALVE CO., Neponset, Boston, Mass., has been awarded contract by the Board of Water Supply for furnishing and delivering eight 3 ft. × 8 ft. twin sluice gates, eight 20-in. hand-operated gate valves, ten 60-in. gate valves with individual electrical drive, four 60-in. gate valves with gang drive, two 60-in. hydraulically operated gate valves and appurtenances and three lines of floor drive shafting for structures at Ashoken reservoir, near Browns Station, Ulster County, and at Croton Lake siphon, Westchester County, at $151,749. Bids were opened on March 8. List of bidders noted on March 10.

*NEW YORK, N. Y.—See item under Buildings.

SYRACUSE, N. Y.—The Board of Contract and Supply on March 21 awarded contract to U. S. CAST IRON PIPE & FOUNDRY CO., 71 Broadway, New York, for about 650 tons of castings, at about $16,652.

*WHITE PLAINS, N .Y.—Bids are asked until 8 p. m., April 11, by the Board of Water Commissioners for constructing a well. The work will be let in two contracts: (a) constructing a steel strainer well in shop (approximate weight 20,230 lbs.), and delivering same on site of well; (b) sinking well with concrete top and wooden well house. Plans and specifications may be seen and bidding forms obtained at the office of the Board of Water Commissioners, or at the office of John M. Farley, Engr., 5 Court St, White Plains.

READING, PA.—Contracts have been awarded as follows by the Board of Water Commissioners: For pipes and specials, to STANDARD C. I. PIPE & FOUNDRY CO., at $6,869. Other bids were: R. G. Wood & Co., $7,109; U. S. Cast Iron Pipe & Foundry Co., $7,085; Warren Foundry & Machine Co., $6,940. Laying supply pipes from the Penn St. reservoirs to Eighth and Penn Sts., JAMES O'ROURKE, at $4,003. Building high service pumping station, to FEHR & O'ROURKE, $24,465. Other bids were: James Matz, $29,221; L. H. Focht & Son, $29,900.

LEBANON, PA.—We are officially advised that bids were received as follows on March 25 by the Board of Water and Lighting Commissioners for (a) about 29,100 lin. ft. of 20-in. gravity main and (b) improving distribution system, involving about 3,700 lin. ft. of 16-in., 13,900 lin. ft. of 32-in., and 3,900 lin. ft. of 10-in. main: (a) JOHN D. KUHN, $87,811, 125 days (awarded contract); W. G. Fritz & Bro., $89,314, 120 days. United Ice & Coal Co., $90,688, 135 days. United States Construction Co., $91,412, 150 days. Pitt Construction Co., $91,856; 120 days, Antonio Cocco, $98,636; 90 days. James Ferry & Son, $101,764; 150 days. M. O'Herron, $107,989; 120 days. B. F. Sweeten & Son, $114,641; 120 days. Weaver Construction Co., $115,381; 250 days. John I. Dick, $118,250; 180 days. Hawman Bros., $127,680; 250 days. (b) W. F. CHISHOLM, $38,738; 100 days (awarded contract). Partridge & Slowe, $38,934; 90 days. Antonio Cocco, $39,426; 90 days. B. F. Sweeten & Son, $47,820; 120 days. United Ice & Coal Co., $48,513; 125 days. United States Construction Co., $48,519; 150 days. John I. Dick, $50,653; 180 days. James Ferry & Son, $53,136; 100 days. Hawman Bros., $56,779; 200 days. Weaver Construction Co., $62,938; 250 days.

POTTSTOWN, PA.—The Pottstown Water Co. has awarded to WILLAUER & CO. contract for a new reservoir with a capacity of 4,000,000 gallons, at $50,000.

QUITMAN, GA.—Bids will be received by the Mayor and Board of Aldermen until April 6 for furnishing material and constructing a steel tower and tank with a capacity of 250,000 gallons. H. S. Jaudon, Box 582, Savannah, Ga., is Engr.

*KISSIMMEE, FLA.—Bids will be received by the City Council until 7.30 p. m., April 12, for the materials and labor needed in the construction of a complete water-works and

sewer system. Plans and specifications can be seen in the office of J. R. Gilbert, City Clk., and in office of Xavier A. Kramer, of Magnolia, Miss., Engr.

WATERPROOF, LA.—The city has awarded contract to LAYNS J. BOWLER CO., Welsh, La., to drill a well to supply the city with water. A. McAllister is Mayor.

BREAUX BRIDGE, LA.—The city has employed A. C. Jones, Opelousas, La., as consulting and constructing engineer to construct proposed water-works plant.

FRANKLIN, TENN.—The city has awarded contract to J. W. WORTHINGTON, Pres. Sheffield C.-I. Pipe & Foundry Co., Sheffield, Ala., to extend the water-works. Granberry Jackson, Mount Pleasant, Tenn., is Supervising Engr.

LAKELAND, KY.—The Board of Control of Kentucky Charitable Institutions, Frankfort, will soon let contract for the proposed water supply system for the Lakeland Insane Asylum, work to consist of a pipe line seven miles in length to the plant of the Louisville Water Co., a reservoir, standpipe, receiving reservoir and pumping outfit. The sum of $65,000 is available. B. H. Davis, of Lakeland, is Ch. Engr. of Asylum.

COLUMBUS, OHIO.—Bids will be received until April 4 by the Department of Public Service, H. S. Holton, Dir., for 700 tons of c.-i. pipe and 25 tons of special castings, bids to be on delivery on line of the work and f. o. b. cars or factory Columbus.

INDIANAPOLIS, IND.—Bids are asked by the Trustees of the Indiana State School for the Deaf, Room 54, State House, until 10 a. m., April 7, for material and labor to fully install complete the outside fire and water lines for the new building. Rubush & Hunter are Archs., Indianapolis.

MOUNT PLEASANT, MICH.—Bids will be received by H. H. Hunter, City Clk., until April 1 for furnishing f. o. b. Mount Pleasant about 50 tons of 6 and 12-in. c.-i. water pipe and fittings.

*AURORA, ILL.—Bids will be received by the Board of Public Works until 5 p. m., April 22, for drilling and casing a deep well. Approximate depth of well 2,250 ft. Well to be not less than 16 ins. to depth of 200 ft., and to finish not less than 8 ins. Specifications on application to T. D. Stinson, Supt. Water Dept.

PLATTEVILLE, WIS.—Bids will be received by P. D. Hendershot, Jr., City Clk., until 7.30 p. m., April 7, for furnishing and erection of a steel tank 21 ft. in diameter by 30 ft. high. Plans and specifications on file at City Clerk's office, and at the office of W. O. Kirchoffer, Engr., 31 Vroman Bldg., Madison, Wis.

MILWAUKEE, WIS.—Contract for laying water mains has been awarded to MICHAEL O'DONNELL, 1215½ Clybourn St., at following prices: 4-in., 34 cts. per lin. ft.; 6-in., 32 cts.; 8-in., 37½ cts.; 12-in., 53 cts., and 16-in., 68 cts.

GRINNELL, IOWA.—W. F. Beard, City Engr., has estimated the cost of 40 blocks of water mains in West Grinnell at $12,000.

FENTON, IOWA.—The citizens have voted to issue $5,000 of bonds for the construction of water-works. T. M. Bilsborough is City Clk.

DETROIT, MINN.—Bids will be received until 7.30 p. m., April 4, by the Common Council for constructing water-works extensions requiring about 8,560 ft. of 6-in., 300 ft. of 8-in. main; 21 hydrants, with 8-ft. covers; eleven gate valves and 4,000 lbs. special castings. L. P. Wolff is Engr., 204-6 Essex Bldg., St. Paul. Charles G. Sturtevant is City Clk.

AUSTIN, MINN.—Oscar Claussen, Consulting Engr., St. Paul, Minn., has prepared sketches for a contemplated improvement of the water-works system. Estimated cost, between $25,000 and $30,000.

WAKEFIELD, KAN.—Bids were received on March 25 by the city for water-works plants. We are officially advised that contract has been awarded to FRED M. CLARK, of Savannah, Mo., at $15,000.

SABETHA, KAN.—We are officially advised that contracts have been awarded by the city as follows: For ten miles of water mains, to T. C. BROOKS & SONS CO., Jackson, Mich.; hydrants and valves, to The WESTERN VALVE CO., Kansas City, Mo.; steel tower and tank, to DES MOINES BRIDGE & IRON CO., Des Moines, Iowa; reinforced-concrete reservoir, to A. STIMPSON, Sabetha, Kan. Bids were opened on March 21.

RUSSELL, KAN.—All bids were rejected on March 24 by the city for constructing a reinforced-concrete dam. New bids will be asked soon.

MADISON, NEB.—Bids will be received until April 6 by F. J. Dankers, City Clk., for the following, f. o. b. Madison: A motor-driven pump, to pump 150 gallons per minute, at from 20 to 25 revolutions of crank at 100 lbs. pressure; a 250-volt, d. c. 15-HP. motor; a horizontal tubular steam boiler, 72-in. × 16-ft.

CHEYENNE, WYO.—The Wyoming Central Irrigation Co., Edward H. Stearnes, Secy., 717 Railway Exchange, Chicago, Ill., will spend about $5,000,000 for irrigation work. The Arnold Co., 181 La Salle St., Chicago, are Engrs.

CHEYENNE, WYO.—Bids will be received until April 5 by F. A. Bacon, City Clk., for $250,000 water-works extension bonds.

HUNTSVILLE, MO.—The city has voted $38,000 of bonds for constructing water-works and to purchase Huntsville Electric Light & Power Co.'s plant.

CALIFORNIA, MO.—Bids will be received by the city until April 7 for the construction of water-works. Estimated cost, about $30,000.

MARKED TREE, ARK.—The city will drill an artesian well, lay mains and erect a tank and power-house for protection in case of fire.

NEWPORT, ARK.—See item under Sewerage.

RUSSELLVILLE, ARK.—We are officially advised that the Fuller-Coult Co., Engrs., Chemical Bldg., St. Louis, Mo., are preparing plans and specifications for a complete water-works system for the Russellville Water & Light Co., including pipe line, valves, hydrants, filtering apparatus, pumping machinery, etc., contracts to be let in the near future.

CORPUS CHRISTI, TEX.—Bids will be received by Clark Pease, Mayor, until April 8 for furnishing f. o. b. Corpus Christi, 4, 6 and 8-in. standard c.-i. water main, c.-i. specials, gate valves, hydrants, etc., for laying about eight miles of water main.

BUFFALO GAP, TEX.—The Gulf, Colorado & Santa Fe Ry. Co. has awarded contract to DALLAS CONSTRUCTION CO., Dallas, Tex., for constructing a reservoir, at about $50,000.

CLAREMORE, OKLA.—The city has voted $35,000 of bonds for the extension of the water-works.

WALTERS, OKLA.—The city has awarded contract to E. R. KERBY, Lawton, Okla., at $67,760 for the construction of water-works, electric light and sewerage systems. A pumping station will be erected in connection with the water-works. The O'Neil Engineering Co., Dallas, Tex., is Engr.-in-Charge.

FORT SILL, OKLA.—Bids are asked until 10 a. m., April 1, by Capt. David L. Stone, Constructing Q. M., U. S. A., for the extension of the water-works system at Fort Sill.

E. R. KERBY, Lawton, Okla., the lowest bidder, has been awarded contract, at $13,616, for the construction of water distributing system, including installation of pipe, valves and hydrants from plans by D. L. Stone, of Fort Sill.

CENTRALIA, WASH.—See item under Electric Railways.

ROSLYN, WASH.—Bids have been received by Thomas Ray, City Clk., for furnishing f. o. b. at shipping point flanged spiral riveted steel pipe and also straight steel pipe, requiring about 5,273 ft. of extra heavy, 5,736 ft. double extra heavy, and 14,794 ft. standard steel pipe. Contract has been awarded to CRANE & CO., of Seattle, Wash.

VALE, ORE.—We are officially advised that JAMES A. GREEN, engineer-constructor, of Chicago, has been awarded contract for the engineering and construction of the irrigation works for the Willow River Land & Irrigation Co. of Vale. This work comprises the building of two dams of the earth fill type, each about 100 ft. high, with complete distribution system for the reclamation of approximately 25,000 acres of land in Malheur County, Ore.

FOREST GROVE, ORE.—We are officially advised that the PORTLAND WOOD PIPE CO., of Portland, Ore., on March 16 was awarded contract for furnishing 27,000 ft. of distributing mains, 40 Corey hydrants and a large number of Rensselaer valves, c.-i. fittings, etc., for the city.

*HOOD RIVER, ORE.—Bids will be received by H. B. Langille, City Recdr., until 8 p. m., April 25, for the construction of a complete municipal water system in and for the city of Hood River. Complete plans and specifications may be seen at the office of P. M. Morse, City Engr., and Newell, Gossett & Walsh, 33 Washington Bldg., Portland, Ore.

CLAREMONT, CAL. — The Claremont Orange Development Co. will lay 25,000 ft. additional cement pipe. The company is developing 580 acres.

SAN FRANCISCO, CAL.—Contracts have been awarded as follows, it is reported, at the Presidio, San Francisco: To JOHN J. LEONARD, San Francisco, for construction of reservoir, at $28,750; water pipes, weirs, etc., to PRINGLE, DUNN & CO., San Francisco, at $18,975; necessary plumbing, to BURNHAM PLUMBING CO., San Francisco; constructing stack, installation of boilers, pumps, etc., CHARLES C. MOORE & CO., San Francisco; concrete stack, $2,100; BABCOCK & WILCOX, boiler, etc., at $16,850; and to LAIDLAW-DUNN-GORDON, for Corliss pumps, at $37,300.

PALO ALTO, CAL.—Bids were opened as follows by the Board of Public Works on March 14 for the construction of a water tower: Rickert-Ehrhart Construction Co., concrete tower, $7,998; Des Moines Bridge & Iron Co., five bids on steel tower, varying from $6,925 to $10,400, according to style of tank, with extra charge for excavation; Chicago Bridge & Iron Works, steel tower, $7,000 and $10,000, foundation to be prepared by the city; Continental Fire Proofing Co., of San Francisco, $12,900; Nott & Monzingo, of Palo Alto, concrete tower, $6,766 and $9,068; Standard Engineering Co., concrete tower, five bids, varying from $5,695 to $9,100; Hazlewood & Doane, of Palo Alto, concrete tower, $6,600, according to own plans; Keating & Son, of Palo Alto, concrete tower, three bids, ranging from $6,396 to $7,850, each bid subject to various modifications.

RIVERSIDE, CAL.—The Riverside Water Co., Riverside, will receive bids until April 6 for 40,730 ft. of 30-in. double riveted steel water pipe laid in trench with fittings.

PHOENIX, ARIZ.—We are officially advised that bids were received as follows on March 14 by Robert A. Craig, Supt. W.-Wks., for a 5,000,000-gallon pumping engine: Platt Iron Works, $14,500; NORDBERG MFG. CO., Milwaukee, Wis., $13,545 (awarded contract); Laidlaw-Dunn-Gordon Co., $10,765; Prescott Steam Pump Co., $14,745; Allis-Chalmers Co., Milwaukee, Wis., $15,730; Pacific Coast Mfg. Co., $25,750; Charles C. Moore Co., $14,425; J. F. Connell, $15,495; George E. Dow Co., $17,650.

THEODORE, UTAH.—Bids will be received until April 9 by the Upper Blue Bench Irrigation District at Theodore for constructing main irrigating canal from Rock Creek to the eastern edge of the Blue Bench, a distance of about 13.56 miles. Edward F. Harmston is Engr., Roosevelt, Utah.

VERNAL, UTAH.—Contract for constructing water-works, bids opened on March 1, has been awarded to D. C. DUNBAR, of Salt Lake City, at $18,007. B. P. Kelly is City Recdr.

LEMAY, UTAH.—We are officially advised that the PORTLAND WOOD PIPE CO., of Portland, Ore., has been awarded contract by the Southern Pacific Ry. Co. to furnish 29 miles of 8 and 6-in. pipe for head pressures varying from 150 ft. to 300 ft. This pipe is to be used in one line near Lemay, on the west side of Salt Lake and is to furnish water for tank and domestic service.

CALDWELL, IDAHO.—The city proposes to drive two deep wells, erect a pump house, erect a 500,000-gallon standpipe, lay new wood and steel pipe, and purchase and install a pump.

FORT ERIE, ONT.—Erroneously noted last week as Fort Erie, N. Y. Correct item is item advertised.

TORONTO, ONT.—Bids will be received by G. R. Geary, Mayor and Chn. of the Board of Control, until noon, April 5, for the supply of 1,000 ft. of riveted steel pipe, 72 ins. in diameter, and also 20 flexible joints.

BRANDON, ONT.—Bids will be received by the City Clerk until noon, April 1, for supplying from 100 to 200 tons of c.-i. pipe and specials; about 3,000 ft. each of 10-in. and 12-in. sewer pipe; also brass goods for water connections, etc.; all bids to be f. o. b. Brandon. R. E. Speakman is City Engr.

WINNIPEG, MAN.—Bids will be received by M. Peterson, Secy. Bd. of Control, until April 5 for the supply of a quantity of lead pipe which will be used by the city this year.

Bids will be received by M. Peterson, Secy. Bd. of Control until 11 a. m., April 12, for the supply of all the c.-i. pipes, valves and hydrants required by the water-works system this year.

WEYBURN, SASK.—Bids are asked until 8 p. m., April 27, by George Ross, Secy.-Treas., for the following work: Contract "A," pipe laying on the sewerage system; Contract "B1," water-works pump-house; Contract "B2," power-house; Contract "F," mechanical water filters; Contract "G," water-works pumping machinery; Contract "S," sewer pipes; Contract "W," furnishing wooden stave pipes; Contract "X," sewage disposal works. Willis Chapman, Winnipeg and Toronto, Ont., is Ch. Engr.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

*MAMARONECK, N. Y.—Bids for the construction of sewers will be received by the Board of Trustees at the Village Rooms, until 8.30 p. m., April 6. Aproximately 4,525 lin. ft. of sewers are to be laid. Charles W. Buckter is Clk.

ROCHESTER, N. Y.—Bids were opened by the Board of Contract and Supply on March 23 for sewer work as follows: Dewey Ave. sewer: Julius Friedrich Co., $117,040; H. N. Cowles, $78,215; BRAYER & ALBAUGH, 300 Exchange Place Bldg., Rochester, $68,061 (awarded contract). Humboldt St. and other street sewers, in the 21st Ward: William H. Sours, $21,027; H. N. Cowles, $24,173; Thomas Holahan, $24,972; F. C. Lauer & Sons Co., $22,064; Julius Friedrich Co., $40,702; Brayer & Albaugh, $25,243; Nicola Desiderio, $25,734.

WESTFIELD, N. Y.—The cost of the proposed sewer system has been estimated at about $140,000. Clyde C. Hill, of North East, Pa., is Engr.

HUDSON, N. Y.—JOHN M. HOLLER, Albany, N. Y., has been awarded contract for the construction of the contact beds for sewage disposal plant at the New York State Training School for Girls here.

*MADISON BARRACKS (Sacketts Harbor post-office), N. Y.—Bids are asked by the Constructing Q. M., Madison Barracks, until 2 p. m., April 28, for constructing and repairing about 840 ft. of sewer at this post.

HADDON HEIGHTS, N. J.—G. Everett Hill, of the City Wastes Disposal Co., 156 Fifth Ave., New York, is preparing plans for the proposed sewer system. Estimated cost, $53,000.

TRENTON, N. J.—Bids will be received until 8 p. m., April 5, by the Common Council for constructing sewers in portions of Stuyvesant, E. Stuyvesant and Exton Aves., Prospect and Marion Sts. Harry B. Salter is City Clk.

*NEWARK, N. J.—Bids are asked until 3.30 p. m., April 5, by the Essex County Park Commission, 800 Broad St., Newark, for storm water drainage system in Park Ave. in Newark, East Orange, Orange and West Orange, Essex County. The work includes approximately 1,500 lin. ft. 8-in., 800 lin. ft. 10-in., 2,300 lin. ft. 12-in., 2,600 lin. ft. 15-in., 1,800 lin. ft. 18-in., 1,050 lin. ft. 20-in., 650 lin. ft. 22-in., 500 lin. ft. 24-in., vitrified pipe; 500 lin. ft. 24-in. reinforced-concrete pipe, alternate bid; 400 lin. ft. 27-in. reinforced-concrete pipe; 800 lin. ft. 30-in. reinforced-concrete pipe; 90 reinforced concrete catch basins, 6 ft. deep; 40 reinforced-concrete catch basins, 7 ft. deep; 150 cu. yds. brick masonry; 25,000 lbs. cast iron; 1,000 lbs. wrought iron. A. Church is Secy. Plans and specifications can be examined at the office of the engineer, 60 Clifton Ave., Newark. Advertised last week.

BRADFORD, PA.—The City Engineer has estimated the cost of constructing a sewage disposal plant at $91,000.

SCRANTON, PA.—Bids for the construction of three miles of sewer in the 20th Ward were opened by the city on March 21. The sewer is Section B of Sewer District 18, to have when finished a total length of main pipe of 15,076 ft., which does not include the house connections or its tributaries.

The bidders follow: Spruks Bros., main construction, at $3.05 per lin. ft.; Vincent H. O'Hara, $3.08 per lin. ft.; Bennett-Hogette Co., $3.05 per lin. ft.; Steven Flanagban Sons, $3.31 per lin. ft.; Salvatore DeMartino, $3.15; M. Ruddy, $3.19. The bid of Spruks Bros. and that of the Bennett-Hogette Co. were identical for main line construction, but Spruks Bros. outbid their competitors on the price for extras, house connections, manholes and other incidentals. The sewer is to be built from the Lackawanna River to Prospect Ave., and will take in the district included within Pear, Genet, Breck, Ripple, Gibbons and O'Hara Sts. and Prospect, River, Cedar and Pittston Aves.

POTTSVILLE, PA.—Preliminary plans are asked until noon, April 26, by the Schuylkill Company, Pottsville, for a sewage disposal plant. Estimate of cost must accompany plans. Charles T. Straughn is Controller.

PRINCETON, W. VA.—The city has decided to construct a sewerage system. Estimated cost, $30,000; Ernest Bruce is Engr.-in-Charge.

WILMINGTON, N. C.—We are officially advised that the Water and Sewerage Commission, Charles W. Worth, Chn., has selected Hazlehurst & Anderson, Consulting Engrs., Atlanta, Ga., and Wilmington, to design new sewerage system for Wilmington. The plan contemplates extensive treatment works, and $150,000 is immediately available.

*KISSIMMEE, FLA.—See item under Water Supply—Irrigation.

LAFAYETTE, ALA.—See item under Light and Power Plants.

FRANKLIN, TENN.—The city has awarded contract to J. W. WORTHINGTON, Pres. Sheffield C.-I. Pipe & Foundry Co., Sheffield, Ala., for extending the sewer system. Granberry Jackson, Mount Pleasant, Tenn., is Supervising Engr.

MORRISTOWN, TENN.—The Sewerage Building Committee, R. E. Smith, Secy., will have plans ready for estimates about April 20 for the construction of the sewer system. Contract will be let by May 15. Estimated cost, $40,000. Charles E. Collins is Engineer, Drexel Bldg., Philadelphia, Pa.

*MOUNT STERLING, KY.—PAUL & KERSHNER, of Dayton, Ohio, have been awarded contract by the city for furnishing all materials and laying complete about 9½ miles of sewers varying in size from 6 to 24-in. diameter, together with all manholes, lampholes, flush tanks, etc. Bids were opened on March 1. List of bidders noted on March 24. Charles E. Collins is Engr., Drexel Bldg., Philadelphia, Pa.

*LOUISVILLE, KY.—Bids are asked until noon, April 15, by the Commissioners of Sewerage for Contract 65, for the construction of the 15th St. and 23d St. sewers of the Comprehensive System of Sewerage for the city. J. B. F. Breed is Ch. Engr. For details see advertisement in this issue.

JACKSON, OHIO.—An ordinance has been adopted by the City Council authorizing the construction of a sewage disposal plant. Estimated cost, $15,000.

BELLFONTAINE, OHIO.—H. E. Riggs, Consulting Engr., reports site and plant for a sewage disposal plant will cost $20,000. The improvement will be authorized.

LORAIN, OHIO.—Bids will be received by the Director of Public Service until noon, April 9, for furnishing the necessary labor and materials for the construction of sewers according to plans and specifications on file, as follows: Oberlin Ave. storm water sewer, in Oberlin Ave., from the present southerly terminus of said sewer as now constructed, southerly to West 23d St., together with the necessary manholes, intakes, etc.; Illinois Ave., and F St., from East Erie Ave. southerly in Illinois Ave. to F St., thence westerly in F St. to Georgia Ave. Long Ave., from Twelfth St. about 200 ft. southerly. L. B. Johnston is Clk. Bd.

NEWARK, OHIO.—Bids are asked by M. M. Taylor, Dir. Pub. Ser., until noon, April 5, for constructing a tile sanitary and drainage sewer in Granville St.

VINCENNES, IND.—The Board of Public Works has selected Hering & Fuller, 170 Broadway, New York, to prepare plans for the proposed sewer system.

HANCOCK, MICH.—We are officially advised that plans for the construction of sewers are being prepared. C. B. M. Craig is City Engr.

UPPER ALTON, ILL.—B. B. Stakemiller, Village Engr., is preparing plans for the construction of a sewer system to cover the entire town.

CORLISS, WIS.—We are officially advised that the Village Board has had plans and specifications prepared by the Shields Engineering Co., Chicago, Ill., for the construction of a sewerage system. Estimated cost, $9,000. A. G. Cady is Village Clk.

GRINELL, IOWA.—W. F. Beard, City Engr., has estimated the cost of the west side sanitary sewer at $25,000.

HERINGTON, KAN.—We are officially advised that plans have been completed and approved by the State Board of Health for sanitary sewers here. Bids for construction will be asked within about 30 days. Burns & McDonnell are Engrs., Scarritt Bldg., Kansas City, Mo.

LEAVENWORTH, KAN.—Bids will probably be asked soon for the construction of a trunk sewer in District 9. Estimated cost, $24,000; also for lateral sewers to cost $23,000. J. H. Kinmyer is City Clk.

ST. JOHN, KAN.—We are officially advised that plans have been completed and approved by the State Board of Health for sanitary sewers here. Burns & McDonnell are Engrs., Scarritt Bldg., Kansas City, Mo.

GRAND FORKS, N. DAK.—The PASTORET-LAWRENCE CO., Duluth, Minn., has been awarded contract, at $5,920, for the construction of three lateral sewers in District 9.

COLUMBIA, MO.—Bids will be received until April 5 by the city for the construction of about 16,000 ft. of 8 to 12-in. sewers of tile and earthenware, and 55 manholes. Estimated cost, about $19,000. J. S. Bickwell is City Clk.

VANDALIA, MO.—The city has awarded contract at $7,660 to W. C. JUCKSCH, Times Bldg., St. Louis, Mo., to construct the sewer system from plans of the Fuller-Coult Co., Chemical Bldg., St. Louis.

SEDALIA, MO.—Sanitary sewers and complete sewage disposal works will be installed at Sedalia. Contract has been awarded to WILLIAM F. HALL, of Clinton, Mo., at $38,624. Burns & McDonnell are Engrs., Scarritt Bldg., Kansas City, Mo.

KANSAS CITY MO.—Contract for constructing joint district sewer in Brush Creek watershed, bids opened on March 18 by the Board Public Works, has been awarded to WILLIAMS & SAMPLES, of Kansas City, at $256,580, for Jackson pipe. Other bids were received as follows: (a) Jackson reinforced concrete pipe; (b) Merriweather reinforced concrete pipe; (c) reinforced concrete pipe sewer; (d) brick sewer: John Stiffler, Springfield, Ill., (a) $283,549; (b) $270,636, (d) $309,376; M. Walsh, Kansas City, (c) $281,936, (d) $285,990; T. McCarty, Kansas City, (c) $316,655; William C. Mullins, Kansas City, (c) $311,103.

NEWPORT, ARK.—Bids will be received until 2 p. m., April 27, by the city for 6½ miles of sanitary sewers, and a pumping plant. Estimated cost, $40,000. For further particulars address C. S. Henry, Secy., Newport, Ark., or Lund & Hill, Engrs., Little Rock, Ark.

CLINTON, OKLA.—Contract for constructing pipe sewers, bids opened on March 15, has been awarded by the city to HEMAN CONSTRUCTION CO., of St. Louis, Mo., at $17,838.

TULSA, OKLA.—D. C. Fehstermaker, City Engr., has estimated the cost of constructing the Elmwood sewer extension at $17,000, 1,240 ft., brick construction, diameter 7 ft.

ENID, OKLA.—Bids are asked until noon, April 21, by E. R. Lee, City Clk., for the construction of a lateral sewer in the Garland Addition of the city.

TELLURIDE, COLO.—Bids will be received about April 5 for the construction of a sewer system for West Telluride. Estimated cost, about $14,094. J. S. James is City Engr.

WENATCHEE, WASH.—Bids will be received about April 20 for the construction of the proposed sewer system. Estimated cost, about $255,000. C. S. Ward is City Engr.

LOS ANGELES, CAL.—JOSEPH GORBAVACH has been awarded contract, at $17,998, for the construction of a main sewer on Pasadena Ave., from York Boulevard to Ave. 66.

LODI, CAL.—Contract for constructing the sewer system, bids opened on March 14, has been awarded to J. M. APPLETON and FREDERICKSON BROS., of Lodi, at $32,540. Contract for pipe has been awarded to GLADDING, McBEAN & CO., at $17,401.

PORTERVILLE, CAL.—The City Engineer is preparing plans for sewer extensions. Estimated cost, $40,000.

TEMPE, ARIZ.—L. G. Knipe, C. E., of Phoenix, Ariz., has prepared preliminary profile drawings for a sewer system. Estimated cost, $30,000.

BRANDON, ONT.—See item under Water Supply—Irigation.

CALGARY, ALTA.—Bids will be received by the City Commissioners until 4 p. m., April 22, for supplying the city with the following material: Salt, glazed, vitrified clay sewer pipe, according to specification to be furnished by the City Engineer, bids to state price f. o. b. Calgary. H. E. Gillis is City Clk.

WEYBURN, SASH.—See item under Water Supply—Irrigation.

MOOSE JAW, SASH.—Bids are asked by W. F. Heal, City Clk., until 8.30 a. m., April 11, for trenching and laying 7,100 lin. ft. of 10-in. and 12-in. sewer pipe.

GARBAGE DISPOSAL.

SCRANTON, PA.—Bids are asked by C. V. Terwilliger, Dir. Pub. Ser., until 1 p. m., April 5, for furnishing the city with two 600-gallon horizontal wood or steel tank street sprinklers with brake, to be equipped for two horses and have 4-in. steel tires and to be delivered f. o. b., Scranton, ready for use; also for two 2-horse sprinkling wagons with 9-ft. brooms, 24 ins. in diameter with brake, delivered f. o. b., Scranton, ready for use.

BALTIMORE, MD.—Bids are asked until 11 a. m., April 6, by the City Register, addressed to the Board of Awards, for furnishing the Department of Street Cleaning with one kindling street washing or squeegee machine, with a preparation for laying dust and preserving macadam roads, with a preparation for destroying grass and weeds, with the use of three sprinklers, from May 1, 1910, to Oct. 15, 1910.

WASHINGTON, D. C.—Bids were received on March 23, we are advised as follows by the District Commissioners for collection and disposal of ashes, garbage, dead animals, night soil and miscellaneous refuse in the district and for the removal of ashes and refuse from buildings under the control of the Commisioners:

To collect garbage: Lewis Bros., of Gunston, Va., $85,000 for one year; $75,000 per annum for 3-year period; $75,000 per year for 5-year period.

To dispose of garbage: S. E. Wilson, of Cincinnati, Ohio, $12,000 per year for 5-year period. The Washington Fertilizer Co. of Washington D. C., submitted three different schemes, with prices as follows: $19,000 per year of 1-year period; $16,000 per year for 3-year period; $14,000 per year for 5-year period. $20,000 per year for 1-year period, $17,000 per year for 3-year period, $15,000 per year for 5-year period; $20,000 for 1-year period; $17,000 for 3-year period; $15,000 for 5-year period. Lewis Bros. of Gunston, Va., $20,000 for 1-year period; $18,000 per year for 3-year period; $15,000 per year for 5-year period.

To collect and dispose of garbage: S. E. Wilson of Cincinnati, Ohio, $77,000 per annum for 5-year period. Washington Fertilizer Co. of Washington, three schemes, with prices as follows: $78,400 per year for 1-year period; $69,900 per year for 3-year period; $67,400 per year for 5-year period; $82,400 per year for 1-year period; $76,800 per year for 3-year period; $74,800 per year for 5-year period; $92,400 per year for 1-year period; $87,400 per annum for 3-year period; $84,800 per annum for 5-year period. Lewis Bros. of Gunston, $100,000 per year for 1-year period; $90,000 for 3-year period; $84,800 per annum for 5-year period.

To collect dead animals. No bids.

To dispose of dead animals: Robert E. Mann, $2,240 per annum for 1-year period; $2,020 per annum for 3-year period; $1,810 per annum for 5-year period.

To collect and dispose of dead animals: Robert E. Mann, $3,540 per annum for 1-year period; $3,180 per annum for 3-year period; $2,855 per annum for 5-year period. Lewis Hopfenmaier, $2,590 and $3,590 per annum.

To collect and dispose of night soil: M. R. Ready, $21,000 per annum for 1-year period; $19,000 per annum for 3-year period; $16,900 per annum for 5-year period. Warner Stutler, $17,000 per annum for 1-year period; $16,600 per annum for 3-year period; $16,300 per annum for 5-year period.

To collect miscellaneous refuse: Joseph Marrone of Brooklyn, N. Y., $31,000 per annum for 1-year period; $32,000 per anunm for 3-year period; $33,000 for 5-year period. Warner Stutler, $29,600 per annum for 1-year period; $29,100 per annum for 3-year period; $28,700 per annum for 5-year period. I. T. Brown, of New York, $29,975 per annum for 1-year period; $32,000 per annum for 3-year period; $35,000 per annum for 5-year period.

To dispose of miscellaneous refuse: Joseph Marrone of Brooklyn, $4,000 per annum for 1-year period; $4,000 per annum for 3-year period; $4,000 per annum for 5-year period. I. T. Brown, of New York, $29,975 per annum for 1-year period; $32,000 per annum for 3-year period; $35,000 per annum for 5-year period.

To collect and dispose of miscellaneous refuse: M. R. Ready, $35,000 per annum for 1-year period; $32,500 per annum for 3-year period; $29,903 per annum for 5-year period. Joseph Marrone of Brookyln, $35,000 per annum for 1-year period; $35,000 per annum for 3-year period; $35,000 per annum for 5-year period. Warner Stutler, $29,900 per annum for 1-year period; $29,400 per annum for 3-year period; $29,000 per annum for 5-year period. Caton & Killeen, $15,565 per annum for 5-year period. I. T. Brown of New York, $29,975 per annum for 1-year period; $32,000 per annum for 3-year period; $35,000 per annum for 5-year period.

To collect and dispose of ashes: R. G. Israel, $81,000 per annum for 1-year period; $81,900 per annum for 3-year period; $80,336 per annum for 5-year period. Pollock Drayage & Storage Co., $71,044 per annum for 1-year period; $77,044 per annum for 3-year period; $82,044 per annum for 5-year period. James W. Bean, $75,350 per annum for 1-year period; $74,500 per annum for 3-year period; $73,900 per annum for 5-year period. Caton & Killeen, $68,500 per annum for 5-year period.

To collect and dispose of ashes and refuse from buildings under the control of the Commissioners: M. R. Ready, 50 cts. per yd. for 1-year period; 46 cts. per yd. for 3-year period; 44 cts. per yd. for 5-year period. Warner Stutler, 46 cts. per yd. for 1-year period; 45 cts. per yd. for 3-year period; 44 cts. per yd. for 5-year period. J. F. Conrad, 39 cts. per yd. for 1-year period.

General proposal covering whole work: Washington Fertilizer Co. proposed to undertake the work of collecting and disposing of garbage, miscellaneous refuse and ashes for $172,000 per annum for a 5-year period provided the collections are within the present fire limits, and $182,000 per annum if the fire limits are extended. George Hyman proposed to undertake the work of collecting and disposing of miscellaneous refuse and ashes at $100,000 per annum for a 1-year period; $105,000 per annum for a 3-year period, and $110,000 per annum for a 5-year period.

STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

PEMBROKE, N. H.—Bids are asked until 1 p. m., April 8, by Harry C. Hill, State Engr., Concord, N. H., for about 3,850 ft. of macadam.

*BOSTON, MASS.—Bids are asked at the office of the Charles River Basin Commission, 57 Boylston St., Boston, Mass., until 2.30 p. m., April 4, for surfacing and grading the main portion of the Charles River Dam. The work will require about 5,300 cu. yds. of earth excavation; a small amount of borrowed earth; about 5,500 lin. ft. of trench in which to lay pipes which will be furnished by the Commission; 13 service boxes; two manholes; 46 catchbasins; 2,600 cu. yds. of gravel; 200 sq. yds. of vitrified brick gutters, and 14,000 cu. yds. of loam. Hiram A. Miller, is Ch. Engr.

WATERBURY, CONN.—Bids will be received by the Board of Public Works until 8 p. m., April 5, for grading Sixth St. and Columbia Boulevard. R. A. Cairns is Engr.

HARTFORD, CONN.—Contracts for state road work, bids for which were opened at the office of the State Highway Commissioner, March 28, have been awarded as follows:

Town of Torrington, 21,330 lin. ft. gravel-telford on the Norfolk Road, including seven 20-in., four 15-in., two 30-in., ten 24-in., one 12-in. and two 18-in. tile culverts, to JOSEPH MASCETTI, Torrington, Conn., $1.20 per lin. ft. for grav., $1.70 for telford, 55 cts. per lin. ft. for cobble gutters. Other bidders were: A. Vito, Thompson, Conn., $1.88, $2.60, $1.75, 60 cts.; Pierson Eng. & Cons. Co., Bristol, Conn., $1.65, $2.25, $1.19, $1.99, $1.35, 40 cts. and 60 cts.; C. A. Rossi, Torrington, $1.21, $2.33, $1.40, 46 cts., 48 cts.

Town of Tartland, 3,750 lin. ft. graded road, including two 20-in., one 18-in. and three 15-in. tile culverts, to the BOARD OF SELECTMEN of the town for $11,600, with $1.38 per lin. ft. extra for telford base and 80 cts. per lin. ft., for railing, A. C. Sternberg & Son, West Hartford, Conn., submitted the following figures, $18,250, 60 cts. and $1.

Town of Woodbury, Minortown Road, 5,965 lin. ft., of grading including three 24-in., three 12-in., seven 15-in., and two 30-in. tile culverts, to TRUMBULL & GOODMAN, Litchfield, Conn., $6,935 for grading, 80 cts. per lin. ft. for telford, $1.40 per lin. ft. for rubble drain, $4 per cu. yd. for wall. Pierson Engineering & Contracting Co., Bristol, submitted the following figures: $8,220, 70 cts., 90 cts., $6. Sherman Hill Road, 2,115 lin. ft. grading, including one 20-in. and one 24-in. tile culverts, to GOODMAN & TRUMBULL, $2,980 for grading, 80 cts. for telford, $1.40 for rubble drain, 50 cts. for cobble gutter. Pierson Engineering & Contracting Co., $4,500, 70 cts., 90 cts. and 75 cts. Roxbury Road, 3550 lin. ft. grading, including one 15-in. tile and a reinforced concrete arch culvert, to B. D. PIERCE, JR., CO., Bridgeport, Conn., $7,770 for grading, 65 cts. per lin. ft. for telford, 65 cts. per lin. ft. for rubble drain, 60 cts. per sq. yd. for cobble gutters. Other bidders were: Pierson Engineering & Contracting Co., Bristol, $9,948, 70 cts., 90 cts. and 75 cts.; Goodman & Trumbull, Litchfield, $7,988, 80 cts., $1.40, 50 cts.

Town of Prospect, 2,104 lin. ft. grading, including one 15-in. and two 24-in. tile culverts, to B. D. PIERCE, JR., CO., Bridgeport, $3,500 for grading, 65 cts. per lin. ft. for telford, 65 cts. per sq. yd. for cobble gutters, $4.25 per cu. yd. for masonry. Other bidders were, Edward McManus, Waterbury, Conn., $4,500, $2.25, 75 cts., $7, Donahue Bros., Middletown, Conn., $5,247, 65 cts., $5; C. W. Tryon, Meriden, Conn., $3,900, 60 cts., 55 cts., $5.

Town of Naugatuck, 596 lin. ft. grading, to B. D. PIERCE, JR., CO., $1,200 for grading, 65 cts. per lin. ft. for telford, $4.75 for masonry wall. Other bidders were, Donahue Bros., Middletown, $1,847, 65 cts., $5.; C. W. Tryon, $1,200, 60 cts., $5.

Town of Haddam, eight sections of graded road on the Hartford and Saybrook Turnpike, total length 12,457 lin. ft., including one 30-in., four 15-in., one 24-in., two 12-in. and two 18-in. tile culverts, to PIERSON ENGINEERING & CONTRACTING CO., Bristol, Conn., $10,455 for grading, 70 cts. per lin. ft. for telford, and $1 per lin. ft. for rubble drain. Other bidders were, A. Brazos & Sons, Middletown, $17,400, 60 cts.; Roger Kennedy, Middletown, $18,625, $1.20 and $1.10.

ALBANY, N. Y.—Bids will be received by the Board of Contract and Supply until 3 p. m., of April 4, for the improvement of Myrtle Ave., from the east line of Partridge St. to the east line of West Lawrence St., the work including the paving of the street with repressed vitrified paving blocks on a concrete foundation; also for the improvement of Colonie St., from the east line of Broadway to the west line of Water St.; the work including the paving of the street with vitrified paving blocks on a concrete foundation; also for the improvement of the same street between Broadway and North Pearl St. Walter Melius is City Engr.

JAMESTOWN, N. Y.—A contract has been let to WARNER BROTHERS CO. for 1,810 sq. yds. of bitulithic pavement.

CORNING, N. Y.—Contracts for about 1½ miles of paving have been awarded as follows: To JOHN R. BRADLEY, of Corning, for macadam; and to J. P. STEELE, of Oswego, N. Y., for brick. W. Sleight is Secy. Bd. of Pub. Wks. Bids were received on March 17.

FORT SLOCUM (New Rochelle post-office), N. Y.—Bids are asked by Capt. Peter Murray, Constr. Q. M., until 10 a. m., April 9, for construction of macadam roads, concrete curbs, and brick gutters at Fort Slocum, N. Y. Approximate quantities—Macadam, new, 1,450 sq. yds.; macadam, to be resurfaced, 1,200 sq. yds.; concrete curb, 2,000 lin. ft.; brick gutters, 5,600 sq. ft.

NEW YORK, N. Y.—Bids are asked by the Park Board, until 3 p. m., April 7, for furnishing and delivering 1,000 cu. yds. of broken stone of trap rock and 1,000 cu. yds. of screening of trap rock (No. 1, 1910), for parks, Boro. of the Bronx.

Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, April 5, for furnishing all the labor and materials required for regulating and repaving with asphalt foundation the gutters of St. Pauls Ave., from Beach St. to Van Duzer St.; Hannah St. from St. Pauls Ave. to Van Duzer St.; Catlin Ave., from Cebra Ave. to Pommer Ave., and Tysen St., from Richmond Terrace to Fourth St., together with all work incidental thereto.

Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, April 12, for furnishing and delivering 3,000 cu. yds. of sand and gravel; (2) for furnishing and delivering 30,000 gallons of liquid road oil, with asphalt as base; (3) for furnishing and delivering 30,000 gallons of bituminous road surfacing material, with tar as a base; (4) for furnishing and delivering 41,000 gallons of bituminous road surfacing material (binder); (5) for furnishing and delivering 45,000 gallons of macadam road asphalt as base.

*FORT H. G. WRIGHT (N London, Conn., post-office), N. Y.—Bids are asked until 11 a. m., April 13, by Capt. F. T. Arnold, Constr. Q. M., New London, Conn., for the construction of approximately 1,700 lin. ft. of macadam road and 1,[illegible] sq. yds. of concrete sidewalk at Fort H. G. Wright, N. Y.

LONG BRANCH, N. J.—Bids will be received, until April 6 for resurfacing stone road bed on Norwood Ave. with bituminous pavement. G. K. Allen, Jr., Pat[illegible] Bldg., Red Bank, N. J., is County Engr.

EAST ORANGE, N. J.—Bids are asked until 3.30 p. m., April 5, at the office of the Essex County Park Commission, [illegible] Broad St., Newark, N. J., for about 7[illegible] cu. yds. excavation and 8,800 sq. yds. of bituminous macadam pavement, East Orange Parkway, Essex County. A. Church is Secy.

WESTFIELD, N. J.—Bids are asked by the Town Council until 8.15 p. m. April 4, for furnishing and laying bluestone crosswalks in the Town of Westfield when required during the year 1910. Lloyd Thompson is Town Clerk.

LANSDOWNE, PA.—Bids will be received until April 1 by John W. Davis, Secy. Boro. Council, 22 Runnemede Ave., Lansdowne, for excavating and telford on certain streets; treating certain streets with tarvia; constructing new cement sidewalks and repairing old sidewalks; laying bluestone curb and vitrified block gutters on certain streets; treating certain streets with oil, for the current year.

PITTSBURG, PA.—Bids will be received at the office of the City Controller, until 10 a. m., April 5, by the Bureau of Construction, as follows: grading, curbing and paving with repressed vitrified brick, Class "C": Hallock St., from Grandview Ave. to 200 ft. south of Piermont St; curbing and paving with repressed vitrified brick, class "C": Labelle st., from Grandview Ave. to Piermont St.; grading, curbing and paving with standard sheet asphalt: Coltart Sq., from north side of Louisa St., to Bates St.; furnishing and erection of a brick rattler and appurtenances; furnishing and delivering standard castings for manholes and catch basins. Joseph G. Armstrong is Dir. Dept. of Public Works.

WILKES-BARRE, PA.—The contract for paving Wyoming St. has been awarded to the H. G. MULOCK CO., of Atlantic City, N. J., by the Street Committee. The bids ranged from $2.05 to $2.30 per yd. The contract for curbing the same street was awarded to B. C. COON & CO., of this city, their bid being 68 cts. per ft. There were six bidders for each contract and the cost of the new brick pavement on Wyoming St. from Butler to Beaumont St. will be nearly $13,000. The Mulock Co. is to put in the brick paving and the B. G. Coon Co.'s contract specifies steel bound concrete curbing.

PITTSTON, PA.—The following bids were received on March 22 by the City Councils for paving William St: CUNNINGHAM CONSTRUCTION CO., of Philadelphia, $22,834, for Portland National brick (awarded contract); McConville & Fitzpatrick, of Pittston, $23,025, for Portland National brick.

SCRANTON, PA.—Bids are asked by C. V. Terwilliger, Dir. Dept. of Pub. Wks., until 11 a. m., April 5, for paving various streets in this city.

*BALTIMORE, MD.—Bids will be received by the State Roads Commission, Union Trust Bldg., Baltimore, until noon, April 7, for building 14 sections of State highway, aggregating 52 miles in Ann Arundel, Calvert, Garrett, St. Marys, Washington, Wicomico and Carroll Counties. John M. Tucker is Chn.

Bids are asked by the Board of Awards, until 11 a. m., April 6, for paving various streets with granite, vitrified or bitulithic block. B. T. Fendall, is City Engr.

BALTIMORE, MD.—The following contracts were let on March 28 by the State Roads Commission: For the 5½ miles from Brooklyn to Glenburnie, to the B. F. SWEETEN CO., for $50,910. Of this sum $4,938 is for grading, $38,131 for stone macadam and $7,841 for bridging and draining. To WILLIAM M. ELDER, 220 St. Paul St., for $66,611 for curbing, grading and paving with macadam and vitrified brick, about two miles of the Falls Road, north of the city limits. Kent County-Chestertown, Kennedyville Road, 4.55 miles, to JUNIATA PAVING CO., for $43,916. Of this sum $4,982 is for grading, $34,274 for stone macadam, and $4,959 for bridging and draining. Talbot County-Wye Mills Road, 6.40 miles, to WILLIAM C. EVANS, for $76,168. Of this sum $11,502 is for grading, $58,751 for stone macadam, bridges, culverts and draining, $5,884. Caroline County-Greenesboro Road, 4.07 miles, to THOMAS J. BARRETT, for $40,004. Of this sum $2,577 is for grading, $34,301 for stone macadam and $3,816 for bridging and draining. Lewis Trice Road, 2.67 miles, to HOLT CONSTRUCTION CO., for $29,436. Of this sum $,749 is for grading, $21,870 for stone macadam and $3,816 for bridging and draining. Ridgeville and Damascus Road in Carroll, Frederick, Howard and Montgomery counties, 2.33 miles, to IRA G. ROBINSON, for $20,228. Of this sum $4,259 is for grading, $14,253 for stone macadam and $1,715 for bridging and draining. Prince George's County-T. B. Road, near district line, 6.11 miles, to PETER F. CONNELLY. This will be a gravel road.

WASHINGTON, D. C.—The contract for constructing macadam roads, walks, etc., at the Walter Reed General Hospital, bids for which were received on March 1 by Capt. H. L. Pettus, Constr. Q. M., has been awarded to UNITED ENGINEERING & CONSTRUCTION CO., of Baltimore, Md., at $10,301.

RALEIGH, N. C.—Bids will be received until April 4 by the Board of County Commissioners, F. W. Allen, Chn., for macadamizing Willardsville Road.

CHARLESTON, S. C.—Bids will be received until April 5 by the Board of Public Works, for furnishing the following: Iron castings; bricks, Portland and Rosendale cement, etc.; terra cotta glazed pipe; bluestone, granite or gneiss curb; crushed rock; furnishing and laying about 15,000 sq. yds. of vitrified brick pavement; laying the following: terra cotta pipe; bluestone sidewalks; concrete sidewalk; setting stone curb; hauling terra cotta pipe, also stone curb.

BRUNSWICK, GA.—The contract for paving Newcastle St., about 7,200 sq. yds. with brick and pitch filler, has been awarded to SOUTHERN PAVING CONSTRUCTION CO., of Chattanooga, Tenn., at $1.55 per sq yd. J. B. Hill, is City Engr. Bids were received March 15.

ATTALLA, ALA.—We are officially advised that bids were received by the City Council of Attalla on March 21 for the construction of 5,200 sq. yds. of artificial stone sidewalk, and 8,000 lin. ft. of artificial stone combined curb and gutter. The WEST CONSTRUCTION CO., of Chattanooga, Tenn., were the low bidders and were awarded the contract at $8,924. Hill & Campbell are Engrs., Gadsden, Ala.

LEESVILLE, LA.—The contract for constructing 30,000 sq. ft. of concrete sidewalks has been awarded to ELMORE L. ANDREWS, of Alexandria, La., at 16½ cts. per sq. ft. James B. Sterns, is City Engr.

NEW CASTLE, KY.—Bids will be received by the Fiscal Court, at office of S. Bruce, County Judge, until April 12, for constructing 41 miles of turnpike roads.

LOUISVILLE, KY.—The Board of Public Works, at its meeting held on March 21, awarded contracts for street construction aggregating more than $150,000. The contracts provide for original and reconstruction work. Most of the paving is to be done in asphalt. The awards were made as follows: To the BARBER ASPHALT PAVING CO., New York, Broadway, from 22d to 28th Sts., Walnut St., from 13th to 14th Sts., Chestnut St., from Jackson to Clay Sts., and Barrett Ave., from Breckinridge St. to Hepburn Ave. The bids for this reconstruction work amounted to $63,000. To the AMERICAN STANDARD ASPHALT CO.: Park St. from Fourth Ave. to Sixth St.; York St., from Second St. to Third Ave. and from Fourth Ave. to Sixth St. The contracts for this reconstruction work call for an expenditure of $6,000. To the S. S. SAXTON CO., of Richmond, Ind.: Third Ave., from St. Catherine St. to Ormsby Ave., and Third Ave., from K St. to 450 ft. south of Central Ave. The contract price for this asphalt reconstruction is $32,000. To the AMERICAN STANDARD ASPHALT CO.: Kearts Ave., from Frankfort Ave. north; Slaughter Ave., from Everett to Willow Aves.; Ransdell Ave., east of Ray St., Hillcrest ave., from Frankfort to English Aves.; Grand Ave., from 18th St. to alley west, and Osage Ave., from 18th St. to alley west. This is original construction, the contract price being $32,000. To the L. H. FIGG CO.: Page St., from Barrett to Jacob Aves., and Watkins St., from Highland Ave. west. Original vitrified brick construction to cost $5,500. To G. W. GOSNELL CO., 327 Fifth Ave.: Preston Court, from Preston west, and Goss Ave., from Ash to Milton Sts. Original vitrified brick construction to cost $21,500.

The Board of Public Works, on March 15, awarded contracts for paving with bricks as follows: L. R. FIGG & CO., for Seventh and Magazine Sts.; G. W. GOSNELL CO., 327 Fifth Ave., Marshall and Walnut Sts., at from $1.59 to $1.62 per sq. yd.

Bids on 27,000 square yards of original vitrified brick street construction were opened on March 24, by the Board of Public Works. Five bidders contested for the work. They are the Henry Bickel Company, L. R. Figg & Co., G. W. Gosnell & Co., Theodore Staebler & Co. and the Jefferson County Construction Co. The lowest bid was that of Staebler & Co., which ranged from $1.79 to $1.88 per sq. yd., or an average of $1.82. It is estimated that 1,134,000 blocks will be needed in the proposed construction which is to be done on the following streets: Stratton Ave., from 18th to 23d Sts.; Wilson Ave., from 15th to Bell Sts.; 29th St., from Bank to St. Xavier St.; Hill St., from Ninth to Twelfth; Lydia St., from Hoertz to Texas.; Ash St., from Hickory to Texas, and Mulberry St., from Hickory to Ash St.

CANTON, OHIO.—We are offically advised that bids were received on March 22 for about 12,300 lin. ft. of curb and 61,120 sq. ft. flagstone walks on (a) South Dewalt and (b) North and (c) South Clarendon Aves. P. H. Weber is City Engr. Contracts have been let as follows: (a) D. L. BURCH, $4,236; (b) B. A. DOWNS, $7,473; (c) JOHN SKEELES, $9,107.

OAKLEY (Cincinnati post-office), OHIO.—We are offically informed that bids were received by Oscar Kosche, Village Clerk, on March 25, for furnishing the necessary labor and materials for the construction of 10,000 sq. ft. of cement sidewalk on both sides of Webster Ave., from Clark St. to 30th St., four feet in width. The contract has been let to ALBERT DOBBIE, of Oakley, at 10¾ cts. per sq. ft.

BELLEFONTAINE, OHIO.—Bids will be received by the Department of Public Service until April 15, for grading, curbing, macadamizing and paving Elm St. Clair A. Iuskup, is City Engr.

SYLVANIA, OHIO.—The contract for paving Ohio Ave. has been awarded to REILLY & FILER, The Nasby, Toledo, for $10,568. Riggs & Sherman, The Nasby, Toledo, are Engrs.; W. B. Harris is City Clerk. Bids were received on March 15.

CLEVELAND, OHIO.—Bids are asked at the office of the Board of Commissioners of Cuyahoga County, April 20, for grading, draining and improving Independent Road No. 2, from Harvard Road to the property line, between Henry Krapf and Peter Schmidt, about 8,910 ft. south of Harvard Road in Newburg Heights Village and Township, in accordance with the form of contract and specifications to be furnished by Frank R. Lander, County Surv. John F. Goldenhogen is Clk.

COLUMBUS, OHIO.—See item under Bridges.

COLUMBUS, OHIO.—Bids are asked until noon, April 20, at the office of H. K. Lindsey, County Surv., for all of the labor and material necessary to grade and macadamize the North Starr Ave. Road from Fifth Ave. to Lane Ave., being on the line between Clinton and Perry Townships, and being a distance of 1.27 miles.

YOUNGSTOWN, OHIO.—Bids were received by the Good Roads Commissioners on March 21 for building a road at Rosemont, known as the Rosemont Road. The road will be 2½ miles long and be laid out north from the Rosemont station. The bid of KANE & COMISKY for an all limestone road without being rolled was accepted by the Board, at $14,091.

The Board of Road Commissioners have awarded CHAMBERS & HEASLEY the contract for paving Glenwood Ave. extension at $10,836.

FRANKFORT, IND.—Bids are asked by the Commissioners of Clinton County until 2 p. m., April 9, for the construction of the following gravel roads: Road No. 66 in Sugar Creek Township, 10,466 ft. in length; Road No. 118 on line between Washington and Union Townships, 7,266 ft. in length; Road No. 124 in Kirklin Township, length of road 5,253 ft.; Road 137 on line between Ross and Owen Townships, length of road 10,590 ft., and Road No. 128 on line between Michigan and Union Townships, length of road 2,615 ft. Charles F. Cromwell is County Audr.

NOBLESVILLE, IND.—Bids are asked by the Commissioners of Hamilton County until 1 p. m., April 12, for the construction of seven gravel roads. George Griffin is County Audr.

WABASH, IND.—Bids are being asked by the Commissioners of Wabash and Grant Counties for the construction of a gravel road on the line between Wabash and Grant Counties. J. P. Noftzger is County Audr.

GREENFIELD, IND.—It is reported that bids will be received until April 4 by the County Commissioners, for 22 steel road drags. C. H. Troy, is County Audr.

SOUTH BEND, IND.—Bids will be received by Otto C. Bastian, Chn. Board of Public Works until April 5 for paving Prairie Ave. with either asphalt, bitulithic, brick block or creosoted wooden block pavement.

DECATUR, IND.—Bids will be received until April 4 by the County Commissioners at Decatur for constructing four macadam roads. H. S. Milchaud, is County Audr.

FOWLER, IND.—Bids will be received by the Board of County Commissioners until April 9 for constructing four gravel or stone roads. Lemuel Shipman, is County Audr.

SHELBYVILLE, IND.—Bids will be received until April 6 for improving highways in three townships. G. R. Huntington, is County Audr.

ATTICA, IND.—Bids are asked by the Common Council until 7.30 p. m., April 4, for improving Jackson St. Sam Turman is City Clerk.

FLINT, MICH.—The ASPHALT BLOCK PAVEMENT CO. will receive the contract for paving with asphalt block a portion of Garland St., at $19,769.

*AURORA, ILL.—Bids are asked until 2 p. m., April 4, by the Board of Local Improvements for paving Benton and Walnut Sts. Myron J. Tarble is City Engr.

BELLEVILLE, ILL.—Bids will be received until 3 p. m., April 4, by the Board of Local Improvements for 35,000 yds. of vitrified brick paving, including excavation and curbing and a small amount of sewering. Fred J. Kern is Mayor.

METROPOLIS, ILL.—REED BROS. have secured the contract for street improvements in Metropolis, at $65,000.

BLOOMINGTON, ILL.—The contract for paving Grove St. and Fairview Ave. has been awarded to I. D. LAIN, of Bloomington, at $11,849. E. Folsom is City Engr. Bids were received on March 17.

DES MOINES, IA.—The City Council has awarded the contract to BRYANT, FORT & McLAUGHLIN, of Waterloo, Iowa, for paving with asphalt portions of Chestnut and West Ninth Sts. at $2.16 per sq. yd., and West 42d St. at $2.00 per sq. yd.

IOWA CITY, IOWA.—Bids are asked by O. J. Slaber, City Clerk, until 2 p. m., April 1, for improving various streets in this city.

FARIBAULT, MINN.—The City Council has awarded the contract for paving a number of the streets to FIELDING & SHEPLEY, 216 University Ave., St. Paul, who were the lowest of about twenty bidders. The amount to be paved is 26,000 sq. yds. and brick and sandstone will be used. The amount of the contract is $54,000.

FORT SCOTT, KAN.—Bids are asked by the City Council, until 5 p. m., April 5, for the curbing and guttering with first class combination concrete curb and gutter, and paving with vitrified brick, a portion of Hill St. in the City of Fort Scott. J. O. Brown is City Clerk.

LINCOLN, NEB.—Bids are asked until 1 p. m., April 8, by Roscoe C. Ozman, City Clerk, for paving in this city.

FARGO, N. DAK.—Bids will be received by N. C. Morgan, City Audr. until April 4 for constructing sidewalks for the ensuing year.

MINTO, N. DAK.—Bids will be received until April 1 for construction of cement sidewalks during year. A. E. McKay is City Audr.

ST. JOSEPH, MO.—The Board of Public Works has awarded to KELLY & BUIS the contracts for grading Dewey Ave., Isadore to Franklin St., and Grand Ave.; Tenth St., to a point 282.5 ft. west. The firm submitted a bid of 34 cts. per cu. yd. for the Dewey Ave. work, and 43 cts. for the Grand Ave. grading.

JONESBORO, ARK.—Bids will be received until April 5 by the Board of Street Improvement, District No. 4 for grading and paving with vitrified brick block on gravel foundation about 23,000 sq. yds. of pavement, 105,000 sq. yds. of concrete sidewalks and 10,000 lin. ft. of curb.

FORT WORTH, TEX.—The TEXAS BITULITHIC CO. has contract for 17,500 sq. yds. of bitulithic pavement.

MIAMI, OKLA.—PARDON S. KAULL, has the contract for 27,370 sq. yds. of bitulithic pavement.

SPOKANE, WASH.—Bids will be received until April 18 by the Board of Public Works for paving and curbing in Brown's Addition, Improvement District No. 675, which embraces Riverside, First, Second and Fourth Aves. and other streets.

PORTLAND, ORE.—The following contracts have been let: WARREN CONSTRUCTION CO., 20,306 sq. yds. and the PACIFIC BRIDGE CO., 1,807 sq. yds. of bitulithic pavement.

LOS ANGELES, CAL.—The Board of Supervisors has received bids for construction of Harbor Boulevard out North Main St. to Gardena. The lowest bid received was submitted by the Oil Macadam Paving Co., of Long Beach, at $13,333, T. D. Doneghan Co. bid $13,600. The length of the road is nearly 20,000 ft. These bids do not include furnishing rock, which the County supplies.

WINNIPEG, MAN.—The contract for a railway asphalt plant has been awarded to F. D. CUMMER & SON CO., the Arcade, Cleveland, Ohio, at $16,500. It will have a capacity of 1,800 yds.

GUELPH, ONT.—Bids are asked by the City Engineer, until noon, April 2, for the construction of approximately 15,000 sq. yds. of street pavement with concrete curb, concrete base and tar macadam or similar bituminous surface. John Hutcheon is City Engr.

NEW WESTMINSTER, B. C.—The City Council has decided to lay a number of cement sidewalks this year.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

NORTH ADAMS, MASS.—It is stated that the George E. Keith Shoe Co., of Brockton, Mass., contemplates erecting a plant here.

PORTLAND, CONN.—The Portland Specialty Mfg. Co., of Portland, whose foundry was recently destroyed by fire, has decided to rebuild. Work has been started on a temporary structure, which will be used in filling orders already booked, and a permanent building will be erected later.

TONAWANDA, N. Y.—The Martinizing Process Co. will erect an addition to its plant for waterproofing paper at Fillmore St. and the Erie and New York Central railroads, doubling its capacity. New machinery will be installed.

BUFFALO, N. Y.—The Lobee Pump & Machinery Co. is receiving bids for a factory of brick and steel, 140 × 80 ft., two stories high, which it will erect at Dearborn and Parish Sts. and the New York Central R. R.

An addition is to be made at once to the tank-car repair shops of the Atlas Works of the Standard Oil Co. at Elk and Babcock Sts. and the Buffalo Creek R. R., Buffalo.

The Alfred E. Baxter Engineering Co., 945 Ellicott Square Bldg., has prepared plans and is receiving bids for a cereal mill, 60 × 100 ft., four stories high, and a grain elevator, 40 × 90 ft., 100 ft. high, of reinforced concrete, with tower and head-house of structural steel, to be erected by the Buffalo Cereal Co., at Abbott Road and the Lake Shore & Michigan Central R. R., to replace mill recently destroyed by fire. Lawrence E. Harmon is Pres., 44 Dun Bldg.

The Aldrich Mfg. Co. has had plans prepared for a 2 and 4-story addition of reinforced concrete to be made to its plant at Illinois St. and the Delaware, Lackawanna & Western R. R. Bids will be received by I. A. Aldrich, Pres., 55 Illinois St.

BUFFALO, N. Y.—We are officially advised that the DUROLITHIC CO., 460 Ellicott Sq., Buffalo, N. Y., has been awarded the complete contract for the erection of Building No. 44, 73 × 192 ft., for the American Radiator Co., Buffalo, N. Y. Stone foundations, concrete floors, steel frames and sash, tile roofs, brick exterior walks will be constructed.

NEW YORK, N. Y.—We are officially advised that the general contract has been let to the GEORGE A. JUST CO., 232 Vernon Ave., Long Island City, to erect the proposed 2-story bottling house, 65 × 75 ft., at Park Ave. and 50th St., for the F. & M. Schaefer Brewing Co. ANDREW BROSE, 1 Madison Ave., New York, has the mason work. Kastner & Dell, 1133 Broadway, are Archs.

ELMIRA, N. Y.—Daniel J. Kelly, 120 Railroad Ave., Elmira, N. Y., has bought site upon which he will erect a tin shop to replace the present one.

ROCHESTER, N. Y.—An application has been made to the Fire Marshal for permission to build a steel reinforced-concrete addition to the Gleason Works on University Ave., at a proposed cost of $45,000.

PHILADELPHIA, PA.—The purchase of the tract on the north side of Tacony St., 200 ft. west of Orthodox St., by Ernest S. Lamb from the Provident Life & Trust Co. is the preliminary step toward the erection of a manufacturing plant on the site. The purchaser is an official of the Crain Pump & Lumber Co., 2013 Market St., and will transfer title soon to that corporation. The tract, which measures 259 ft. ¼-in. by 343 ft. 10⅝ ins. and has a frontage of the Pennsylvannia R. R. The buildings to be erected by the Crain Pump & Lumber Co. will cover the entire lot.

The annual report of the Cambria Steel Co., Arcade Bldg., states that approximately $7,000,000 will be spent on its plants in the next few years for improvements now authorized and in contemplation. To partly finance this undertaking, $5,000,000 of unissued treasury stock will be offered to shareholders.

WILMINGTON, DEL.—JOHN E. HEALY, 613½ Shipley St., Wilmington, has been awarded the contract for a meat market and cold storage plant and stable for Swift & Co., at Maryland Ave. and Madison St. Cost, $21,202.

HIGH POINT, N. C.—The North Carolina Public Service Co. has purchased a tract of land on South Main St., High Point, on which it expects to build a car house. J. K. Russell, Greensboro, N. C., is Mgr.

GRAHAM, N. C.—The River Falls Cotton Mills Co., of River Falls, N. C., is reported to be preparing plans for the construction of its buildings and its waterpower dam, preparatory to equipping for the manufacture of cotton goods. This company is capitalized at $250,000. It is stated that 20,000 spindles and accompanying machinery will be installed. J. W. Menefee, of Graham, N. C., is Pres.

SANFORD, N. C.—The Effie Hosiery Mills will be the title of the plant to be established here by W. A. Ellington, of Chapel Hill, N. C. Mr. Ellington has secured a suitable building and will install 60 knitting machines driven by electricity. The daily output will be about 200 dozen pairs of half-hose.

SALISBURY, N. C.—It is reported that the Vance Cotton Mills will build an addition. This company now has 10,000 ring spindles, driven by steam power.

LANDRUM, S. C.—The Blue Ridge Hosiery Co., of Landrum, S. C., has decided to double its capacity and is arranging for the erection of a building to hold the necessary machinery. This company has 112 knitting machines, steam power equipment, dyeing and finishing plant, etc., producing cotton hosiery.

JONESVILLE, S. C.—The Palmetto Hosiery Co. has been chartered with a capital stock of $75,000, J. J. Littlejohn is Pres. and Treas. The company will install 100 knitters, 20 loopers, 20 ribbers and a Corliss steam engine for the production of fine half-hose. The daily capacity will be 750 dozen pairs, and about 200 operatives will be employed.

SAVANNAH, GA.—The Jesse V. Palmer Co., of Greenwich, N. Y., contemplates locating a plant to manufacture knit underwear, and may install spindles to supply the necessary yarns at Savannah, Ga.

ATLANTA, GA.—In a short time the Pittsburg Plate Glass Co., Frick Bldg., Pittsburg, Pa., will either build or lease a large building, containing approximately 100,000 sq. ft. of floor space, and will begin the manufacture of bevel glass mirrors here. About 250 men will be employed.

JACKSONVILLE, FLA.—We are officially advised that the St. Johns River Terminal Co., of Macon, Ga., will erect the following buildings here: Yard office, 20 × 55 ft., $1,350; round-house, 4 stalls, $4,500; store-room and office, 32 × 42 ft., $1,500; oil house, 16 × 26 ft., $325; turn-table and foundation, $6,000; water softener plant, $5,700; cinder pit, $1,800. The buildings will be of frame construction on concrete foundations. The contract has been let to J. C. HALSEMA, of Jacksonville. Machinery for light repairing, to cost $20,000, will be installed and bids for it may be sent to L. B. Rhodes, Master Mechanic, Georgia Southern & Florida Ry. Co., Macon, Ga. William C. Shaw, Jr., is Ch. Engr. and Arch., G. S. & F. Ry. John B. Munson, Macon, Ga., is Pres. of the St. Johns River Terminal Co.

BAYOU LABATRE, ALA.—The Dunbar, Lopez & Dukate Co., of Mobile, Ala., plant to be built to can the oysters taken from Alabama waters will be located on Bayou Labatre, a mile from the town of Bayou Labatre, and on land purchased from Capt. P. F. Alba. It is stated that $75,000 or $100,000 will be spent in construction of the plant and it is expected to have it far enough completed to handle the August catch of shrimp, with everything in full working order for the opening of the oyster season next fall.

CINCINNATI, OHIO.—A factory will be built by the National Biscuit Co., Tenth Ave. and 15th St., New York, on the site now occupied by a 2-story brick residence and a 3-story brick residence at 421-423 Richmond St. A permit to demolish the two buildings to make room for the improvement has been taken out.

The Cincinnati Traction Co. has purchased seven acres of land as an addition to its 5-acre lot at Winton Pl. Repair shops and storage houses will be built so that part of the buildings now occupied by the company can be used by the Cincinnati Car Co., which proposes practically to double its facilities. Dana Stevens is Gen. Mgr.

CANTON, OHIO.—The Canton Baking Co. announces that it will erect an addition to its plant on East Tenth St., involving an expenditure of about $20,000, including the cost of the machinery to be installed upon the completion of the building. Brick and steel will be used in the construction of the building and it will be two stories high. GEORGE WHIKE is the contractor and Guy Tilden is the Arch. J. L. Liggett is Secy.-Treas.

CONNERSVILLE, IND. — The Ansted Spring Plant Co. will receive bids for the erection of a factory on the site of the plant recently burned, as soon as plans can be prepared.

LAFAYETTE, IND.—B. B. Taylor, Gen. Mgr. Monon Railroad, has ordered plans for the construction of additional shops and additional office buildings in this city. Bids will be called for soon.

INDIANAPOLIS, IND.—Charles F. Kennedy and associates are preparing to let a contract for the erection and equipment of a co-operative abbatoir plant.

DETROIT, MICH.—The Anderson Forge & Machine Co., W. R. Anderson, Gen. Mgr., 21-31 St. Aubin Ave., Detroit, is having plans prepared for a forge plant, consisting of the following buildings: Office building, 50 × 50 ft.; four forge buildings, two 200 × 65 ft., one 337 × 65 ft., one 220 × 65 ft.; material building, 80 × 175 ft.; power building, 60 × 50 ft.; main building, two stories, 320 × 65 ft., all to cost about $750,000. Stock brick, reinforced concrete, composition roof, structural iron and electrical work will be used in construction. The company will advertise for bids.

Louis Kamper, Arch., 701 Fine Arts Bldg., Detroit, has let the general contract for the building of the Artcraft Lithographing Co., Second Ave. and Porter St., to ALFRED PERRY, 272 Clark Ave., Detroit.

Varney, Winter & Varney, Archs., 58-62 Equity Bldg., Detroit, have let the following contracts for the proposed factory building, two stories and basement, 68 × 127 ft., for the Playtime Mfg. Co., W. C. J. Hollon, Pres., 49 Larned St.: Structural iron to H. B. LEWIS, 45-57 Joseph Campeau Ave.; masonry to CHAPMAN BROS., 571 Tillman Ave.; carpentry to STRELOW & PETT, 694-702 Mack Ave.; painting to H. J. WILDE, 793 Joseph Campeau Ave.

The Detroit Cabinet Co., John Hoetz, Mgr., 988-1010 Riopelle St., Detroit, have let general contract to MAX BARTHOLMAEI, SON & CO., 466-472 Warren Ave., for a 2-story addition, 60 × 160 ft., to the present factory building.

PONTIAC, MICH.—The Hayes Mfg. Co., H. P. Carrow, Secy., 458-80 Maybury Ave., Detroit, will soon take figures on a 3-story factory, 200 × 50 ft., to be located in Pontiac. Stock brick, reinforced concrete, composition roof and structural iron will be used in construction.

BAY CITY, MICH.—The West Bay City Sugar Co., of Bay City, Mich., has let the general contract for its proposed factory building to JACKSON & CHURCH, of Saginaw, Mich. The factory is to be of concrete and steel construction.

MOUNT CLEMENS, MICH.—T. Van Damme, Archt., Mount Clements, Mich., has let the general contract for the proposed factory building for the Mount Clemens Automobile Co., to J. D. PAGANETTI CO., of Mount Clemens.

JACKSON, MICH.—Allen & Hill, Archs., 711 Gas Bldg., Detroit, have prepared plans and specifications for a 3-story and basement factory building, 45 × 112 ft., for the Jackson Corset Co., of Jackson, Mich. Stock brick, Bedford cut stone, composition roof, galvanized iron skylight and structural iron will be used in construction.

TRAVERSE CITY, MICH.—The Traverse City Refrigerator Co., of Traverse City, Mich., contemplates erecting a factory building soon.

CHICAGO, ILL.—Preparatory to enlarging the present plant at 960 North Rockwell St., the H. C. Niemann Furniture Mfg. Co. has purchased a tract of vacant ground space adjacent to the plant except for an alleyway and will build soon. The ground acquired lies at the southeast corner of Moffat and Rockwell Sts., and measures 125 × 124 ft. It was purchased from John C. Dymond.

ST. PAUL, MINN.—W. J. HOY CONSTRUCTION CO., Metropolitan Opera House Block, city, has been awarded the contract for the construction of the factory and cold-storage warehouse for R. L. Gould & Co. J. Walter Stevens, N. Y. Life Bldg., is Arch. The structure will have three stories and will be fireproof.

ST. JOSEPH, MO.—The Rullman-Rullman Mfg. Co., of Wathena, Kan., making washing machines, has bought site in St. Joseph, Mo., where it will locate.

ST. LOUIS, MO.—The Nicholls-Ritter Realty & Financial Co., 718 Chestnut St., has sold to Fayette R. Plumb, Inc., Tucker and James St., Philadelphia, Pa., thirteen acres adjoining the city limits on the Terminal R. R., for account of the Terminal Railroad Association. The company manufactures hammers, hatchets and all sorts of mechanical tools and plans to establish a Westerr factory. Walter W. Birge, Secy. of the corporation, has settled upon a factory site on the Terminal Railroad belt line just west of the site of the Curtis Saw Co. The property is bounded on the north by Hamberger Ave., and on the east by the Terminal R. R., two blocks northwest of the Suburban Garden. Fayette R. Plumb Co., Inc., will erect a factory and will commence grading the property at once and will soon have the buildings under way.

WILSON, ARK.—Lee Wilson & Co., whose lumber mill at Wilson, Ark., was destroyed by fire on March 3, will build a new plant to cost $100,000.

SAN FRANCISCO, CAL.—C. V. and V. Fitch will build a 3-story brick factory in the west side of Front St., 61 ft. south of Pacific St., to cost $21,000.

LONG BEACH, CAL.—The Long Beach Mfg. Co., recently incorporated for $50,000, has secured a temporary factory. The company will increase its capital stock to $1,000,000 to erect a factory building. The company will manufacture an automatic telephone switchboard and other electrical appliances. Charles Austin, L. M. Ellis, George Denee, A. S. Myers are interested.

TUCSON, ARIZ.—J. H. & D. H. Holmes are working on plans for a group of buildings for the Tucson Iron Works. W. B. Corberly, Pres., will soon leave for the East to purchase equipment. The company succeeds the Gardiner Worthen Goss Co., and is under agreement to the city to expend $20,000 in six months in building and machinery.

MONTREAL, QUE.—Mr. Eugene Payette, Arch., 15 St. James St., is preparing plans for the erection of six additional buildings at the corner of Delorimiere Ave. and Logan St., for S. Barsalou & Co., Ltd., soap manufacturers. Mill construction will be employed for the erection of these buildings and they will vary in size from 100 × 50 ft. to 120 × 55 ft. It is expected that bids will be called on this work soon.

WELLAND, ONT.—The Welland Glass Mfg. Co. will build a plant, comprising four buildings, of steel construction, to cost $75,000. The company will install equipment for the manufacture of window glass.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

TRAP ROCK, ETC.—New York, N. Y.—See item under Streets and Roads.

SAND, ROAD OIL, BITUMINOUS ROAD SURFACING MATERIAL, ETC.—New York, N. Y.—See item under Streets and Roads.

CANAL.—Vicksburg, Miss.—Bids will be received soon by J. D. Laughlin, Chancery Clk., for constructing a canal in Sandy Bottom.

FIRE APPARATUS.—Sullivan, Ind.—The City Council has decided to purchase $4,500 worth of additional equipment for the Fire Department.

FIRE HOSE.—Los Angeles, Cal.—Bids will be received by the City Clerk until April 19 for 12,000 ft. of 2½-in. cotton fire hose for the Fire Department.

*DREDGING.—Chicago, Ill.—Bids will be received by Maj. Thos. H. Rees, Corps Engrs., U. S. A., until 10 a. m., April 25, for dredging in Calumet River, Ill.

*DREDGING.—New York, N. Y.—Bids will be received until noon, April 26, by Col. Wm. T. Rossell, Corps Engrs., U. S. A., Army Bldg., New York, for dredging in Passaic River, N. J.

*REVETMENT.—Grand Haven, Mich.—Bids will be received until 3 p. m., April 29, by Maj. C. S. Riche, Corps Engrs., U. S. A., Grand Rapids, for repair of south revetment at Grand Haven.

*DREDGING.—Newport, R. I.—Bids will be received by Lieut.-Col. J. C. Sanford, Corps Engrs., U. S. A., Newport, R. I., until 11 a. m., April 23, for dredging in New Bedford and Fairhaven Harbors, Mass.

FIRE ALARM BOXES.—Spokane, Wash.—Contract for new fire alarm boxes has been awarded to the GAMEWELL FIRE ALARM TELEGRAPH CO., of New York, by the Fire Commissioners, at $7,580.

CEMENT.—Marquette, Mich.—Bids will be received at the office of the Park, Cemetery and Street Commission until April 1 for furnishing about 4,000 bbls. of Portland cement. J. F. Anderson, Secy. Comn.

FREIGHTER.—Lorain, Ohio.—The AMERICAN SHIPBUILDING CO., Lorain, has been awarded a contract by W. H. Becker, of Cleveland, for a freighter with 12,000 tons capacity. Estimated cost, $424,000.

*LOCK GATES.—Kansas City, Mo.—Bids will be received until noon, April 25, by Maj. Edward H. Schulz, Corps Engrs., U. S. A., for manufacture and delivery of two pairs lock gates for Lock No. 1, Osage River, Mo.

CONCRETE TOWER.—Vicksburg, Miss.—Contract for constructing a reinforced-concrete observation tower in the National Military Park has been awarded to the W. T. YOUNG BRIDGE CO., of Nashville, Tenn., at about $10,000.

*CEMENT.—Wheeling, W. Va.—Bids will be received until 11 a. m., April 28, by Capt. F. W. Altstaetter, Corps Engrs., U. S. A., for furnishing and delivering about 4,500 bbls. of American Portland cement for Dam No. 19, Ohio River.

*DRAINAGE.—Nevada, Iowa.—The Story County Board of Supervisors has established Drainage Dist. No. 19, and will soon ask for bids, probably about April 1. F. G. Dunahugh, County Audr., Nevada; C. A. Boughman, Ames, Iowa, Engr.

LEVEE.—Memphis, Tenn.—No bids were received on March 18 by Maj. M. L. Walker, Corps Engrs., U. S. A., Mississippi River Comrs., First and Second Dists., Custom House, Memphis, for levee work in White River Levee Dist.

STONE.—Vicksburg, Miss.—Bids will be received until noon, April 18, by Capt. Clarke S. Smith, Corps Engrs., U. S. A., Mississippi River Comn., Third Dist., Vicksburg, for furnishing about 20,000 cu. yds. of stone by rail or water, delivered in this District.

DREDGING.—Baltimore, Md.—Bids were received on March 23 by the Board of Awards for dredging. Contract was awarded to the MARYLAND DREDGING CO., Baltimore, at 14 cts. and 17 cts. per cu. yd. Estimated cost, $40,000. O. F. Lackey, Harbor Engr.

MOULD.—New York, N. Y.—Bids were received by the Department of Parks on March 24 for furnishing and delivering 1,700 cu. yds. of organic mould for parks, Boro. of The Bronx. The New Jersey Co., 11 Broadway, New York, was low bidder at $6.715.

DREDGING.—Boston, Mass.—Bids will be received until April 1 by the Board of Harbor and Land Commissioners, Boston, for dredging a channel in Neponset River above Neponset Ave. highway bridge, requiring about 90,000 cu. yds. of excavation, scow measurement.

FIRE SYSTEM.—Boston, Mass.—Bids will be received until 11 a. m., April 23, at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for fire protection system in buildings Nos. 58, 60, 62 and 79, Navy Yard, Boston; specification No. 1704. Estimated cost, $6,200.

DRAINAGE.—Miller, Ind.—Bids will be received until April 1 by M. J. Zelibor, Town Clk., for the construction of a drainage system consisting of 15,000 cu. yds. of open ditch excavation work, and 2,100 lin. ft. of 36-in. reinforced-concrete pipe. Melton & Cutler, Engrs., Gary, Ind.

DITCH.—Rock Island, Ill.—The Commissioners of Hampton Drainage District No. 4 have accepted plans for a drainage ditch which were prepared by Wallace Treichler, City Engr., of Rock Island. The ditch is to be 4¼ miles in length, 30 ft. wide and 7 ft. deep. Estimated cost, $17,250.

WALL.—Columbus, Ohio.—Bids will be received up to April 12 by the Ohio State Board of Public Works for the construction of a revetment wall along the towpath of the upper basin of the Ohio Canal at Akron, after plans and specifications approved by Charles E. Perkins, Ch. Engr.

*LEVEE.—Greenville, Miss.—Bids will be received until noon, April 27, by the Board of Mississippi Levee Commission at Greenville, Miss., for the construction of new levees at Riverton and at Shiloh, aggregating about 900,000 cu. yds. of embankment. W. J. Shackelford, Ch. Engr.

DOCK REMOVAL.—New York, N. Y.—Bids will be received until 11 a. m., April 16, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for removal of a portion of Cob Dock at the Navy Yard, New York. Specifications are on file at office of Engineering News, New York.

SUPPLIES.—New York, N. Y.—Bids will be received by E. V. Frothingham, Comr. of Public Works, Manhattan Boro., until 11 a. m., April 6, for furnishing and delivering (1) 30,000 gals. of No. 4 paving cement; (2) 700 bbls. of Portland cement; (3) 1,500 cu. yds. of washed gravel; (4) 7,000 cu. yds. of sand.

IRON FENCE.—Boston, Mass.—Bids will be received by the Charles River Basin Commission, 367 Boylston St., Boston, until 2.30 p. m., April 7, for furnishing and erecting an iron fence along the Basin wall of the Charles River Dam. About 1,[illegible]0 lin. ft. of fence will be required. Hiram A. Miller, Ch. Engr.

COAL SHED.—Superior, Wis.—Contract for the new coal shed to be erected by the Northwestern Fuel Co. at its dock No. 1 in this city has been let to the HEYL-PATTERSON CO., of Superior. Estimated cost, $50,000. Contract will be let soon by the Northwestern Fuel Co. for an extension to its present dock.

*LOCK GATES, ETC.—Wheeling, W. Va.—Bids were received by Capt. F. W. Alstaetter, Corps Engrs., U. S. A., on March 21, for furnishing and erecting steel lock gates and lock-operating mechanism for Dams Nos. 8 and 11, Ohio River. List of bidders and itemized bids are given under Contract Prices elsewhere in this supplement.

DAM.—Austin, Tex.—The plans of J. C. Dumont for rebuilding a big dam across the Colorado River have been approved by the City Council and the Business League. The contract calls for a dam 1,400 ft. long, 65 ft. high and which will create a lake 30 miles long. The cost will be $1,000,000. The contract is to be ratified by a popular vote.

DRAINAGE.—Wilson, N. C.—Charter has been granted the Britt Engineering & Construction Co., with headquarters at Wilson, which will reclaim by means of drainage canals, swamp and overflowed lands in that section. The work is now under way on a large scale near Tolsnot, on Contentnea Creek, where the first drainage canal has been completed. The capital stock of the company is $50,000.

*COMFORT STATIONS.—Niagara Falls, N. Y.—Bids were received on March 25 for construction complete, including plumbing and electric work, of Public Comfort Station No. 1, and Dressing Pavilion and Public Comfort Station No. 2 on Goat Island, State Reservation, Niagara Falls, N. Y. Edward H. Perry, Supt. State Reservation, Niagara Falls. Contract was not let as bids were too high. New plans will be prepared.

EXCAVATION.—Montreal, Que.—Bids will be received by the Canadian Light & Power Co. until April 9, for rock and earth excavation in the Beauharnois Canal, between Valleyfield and St. Timothee; also on intake works at Valleyfield, including cofferdam and culverts in canal. Plans, specifications and full particulars may be obtained at the office of the Canadian Light & Power Co., Montreal, E. A. Robert, Managing Director.

DREDGING.—Ottawa, Ont.—Bids will be received by the Department of Public Works, Ottawa, until 5 p. m., April 12, for dredging required at the following places in the Province of Ontario: Byng Inlet, Cobourg, Goderich (Kincardine, Lion's Head and Port Elgin), Owen Sound, Picnic Island, Port Burwell (Port Hope and Whitby), Rainy River, River Thames, Rondeau, Sault Ste. Marie. Bids will not be received unless made on the form supplied, and signed with the actual signatures of bidders.

DRAINAGE.—Wapello, Iowa.—Bids were received on March 16 by the Board of Supervisors at the office of H. W. Baker, County Auditor, Wapello, for excavating about 479,000 cu. yds. and clearing 51 acres in Drainage District No. 12, comprising four sections. Contract was awarded to CHAPMAN BROS., Muscatine, Iowa, as follows: 111,000 cu. yds. excavation, at 7.9 cts. per cu. yd.; 154,000 cu. yds., at 7.9 cts.; 127,000 cu. yds., at 8 cts.; and 87,000 cu. yds., at 7.9 cts. No charge was made for clearing.

RIVER IMPROVEMENTS. — Humboldt, Neb.—Bids will be received, it is stated, until April 4 by Drainage District No. 2, Richardson County, C. M. Linn, Secy., for constructing about eleven mi[illegible] of new channel for the Nemaha River, [illegible] iring the moving of about 810,000 cu. yds [illegible] about 14,000 cu. yds. of Long Branch ch[illegible]el; about 6,320 cu. yds. Long Branch [illegible]; about 2,640 squares of river cleaning, [illegible] the furnishing and constructing of [illegible] steel bridges across new channel of [illegible] Nemaha River.

BARGE CANAL.—Albany, N. Y. [illegible] The bids received on March 29 by F. [illegible] Stevens, Supt. Public Works, for Barge [illegible]al Contracts, were as follows: Contr[illegible] No. 21, for excavating the canal prism [illegible]d constructing guard lock, highway b[illegible] abutments and all appertaining wo[illegible] between the Genesee River and the east [illegible] of Contract No. 6, a distance of 2.43 m[illegible] Maryland Dredging & Contracting Co[illegible] Fidelity Bldg., Baltimore, Md., $1,496,028; [illegible] William T. Gaynor and I. A. Hodge & [illegible] Kirk Bldg., Syracuse, N. Y., $1,498,8[illegible] Frederick A. Brotsch, Jr., Rochester, [illegible] Y., $1,387,510; Lane Brothers Co., Alta[illegible] Va., $1,323,150; Carter Construction C[illegible] 184 La Salle St., Chicago, Ill., $1,452,4[illegible] Engineer's estimate, $1,475,900.

For Contract No. 39, for dredgi[illegible] a channel in the Oswego River and [illegible] forming work incidental thereto between [illegible] Rivers and Fulton, a distance of 10 [illegible] miles: James Stewart & Co., 30 Church [illegible], New York, $1,048,674; S. Pearson & [illegible], Inc., 506 Fifth Ave., New York, $1,135,[illegible]; Engineer's estimate, $972,900.

For Contract No. 78, for the con[illegible]ruction of a dike along the Oswego Rive[illegible] in the vicinity of Fulton, length, 1.23 mi[illegible]: Scott Bros., Rome, N. Y., $56,546; Cu[illegible]ngham & Woodward, Hudson Falls, N. Y., $47,721; Parker & Beebe, Waterford, N. Y., $51,310; I. M. Ludington & Son, Inc., Roch[illegible]er, N. Y., $51,995; Theodore C. Hailes, [illegible], Albany, N. Y., $56,931; Louis J. D'[illegible] Granite Bldg., Rochester, N. Y., $51,99[illegible]; D. C. Stephens, Park Ave., Buffalo, N. Y., $51,479. Engineer's estimate, $55,154.

No bids were received for Contract No. 73, which provides for dredging a channel in the Hudson River, from Northumberland to Stillwater, a distance of 15 miles, for which the engineer's estimate was $648,360.

EXAMINATIONS.

SCIENTIFIC ASSISTANT. — Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 13-14 to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Scientific Assistant, Department of Agriculture, at salaries ranging from $840 to $2,000 a year, depending upon the experience and qualifications of appointees. As a result of this examination, certification will also be made to fill a vacancy in the position of scientific assistant, qualified in horticulture (male), $1,200 a year, in the Indian Service, at San Juan Agency, N. Mex. Age limit, 20 years. Applicants should at once apply for application form 1312 and a copy of the manual.

COMMANDANT OF CADETS. — Carlisle, Pa.—The U. S. Civil Service Commission announces an examination on April 20-21 to secure eligibles from which to make certification to fill a vacancy in the position of Commandant of Cadets, $1,200 a year, at the Indian School at Carlisle, Pa., and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy by reinstatement, transfer, or promotion. Age limit, 25 to 45 years. Application form 304.

TEACHER OF AGRICULTURE.—Carlisle, Pa.—The U. S. Civil Service Commission announces an examination on May 4 to secure eligibles from which to make certification to fill a vacancy in the postion of Teacher of Agriculture (male), $800 a year, in the Indian Service at Carlisle, Pa., and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy by reinstatement, transfer, or promotion. As considerable difficulty has been experienced in securing eligibles for this position, an examination having been held on Oct. 20, 1909, qualified persons are urged to enter this examination. Age limit, 20 years. Application form 1312.

ENGINEERS, DRAFTSMEN, ETC.—Albany, N. Y.—The State Civil Service Commission will hold examinations on April 30 for the following positions: Architectural Draftsman, $1,200 to $1,800 a year; Assistant Actuary, Insurance Dept., $3,000; Asst. Electrical Engineer, $600 to $900; Assistant Engineer, $5 to $6 per day; Assistant Examiner, Insurance Dept., $1,800; Assistant Inspector of Gas, Public Service Commission, Second District, $1,080 to $1,200; Bridge Designer, $1,501 to $2,100; Bridge Draftsman, $1,201 to $1,500; Examiner in Drawing, Education Dept., $720 to $900; First Assistant to Chief of Liquidation Bureau, Insurance Dept., $3,000; Junior Bridge Draftsman, $900 to $1,200; Leveler, $4.50 to $5 per day; Superintendent of Construction, Office of the State Architect, $1,800; Water Analyst, State Department of Health, $720 to $1,200. Applications should be filed on or before April 23. For detailed circular and application blank, address the State Civil Service Commission, Albany, N. Y.

LABORATORY AID AND ENGINEER.—Madison, Wis.—The U. S. Civil Service Commission announces an examination on May 4 to secure eligibles from which to make certification to fill two vacancies in the position of Laboratory Aid and Engineer, $900 a year each, in the Forest Products Laboratory, Madison, Wis., and vacancies requiring similar qualifications as they may occur in the Forest Service, unless it shall be decided in the interests of the service to fill either or both of the vacancies by reinstatement, transfer, or promotion. Age limit, 18 years. Application form 1312. Applications must be filed prior to closing hour on April 23.

CONTRACT PRICES.

(Indexes that this work is advertised in Engineering News.)

VALVES AND OPERATING MECHANISM.—Ashokan Water Supply, New York City.—Bids were received by the Board of Water Supply of the city of New York for furnishing, delivering and installing sluice gates, gate valves, operating mechanism, etc., March 8. The bidders were: (A) COFFIN VALVE CO., Boston, Mass. (awarded contract); (B) Wheeling Mold & Foundry Co., Wheeling, W. Va.; (C) Pittsburg Valve, Foundry & Construction Co., Pittsburg, Pa.; (D) Ogden Iron & Steel Manufacturing Co., 147-149 Cedar St., New York City; (E) Average bid. The itemized bids were as follows:

	A	B	C	D	E
8 [illegible] x 8-ft. twin sluice-gates	$2,369.00	$2,730.00	$3,000.00	$3,750.00	$3,187.25
8 [illegible] in. gate-valves	453.00	516.00	500.00	1,000.00	617.25
20 [illegible] in. gate-valves	2,753.00	2,565.00	2,980.00	5,000.00	3,324.50
16 operating mechanisms for 3-ft. x 8-ft. twin sluice-gates	2,306.00	3,440.00	2,285.00	1,500.00	2,382.75
8 operating mechanisms for 60-in. gate valves, gang driven	840.00	906.00	880.00	500.00	781.50
2 operating mechanisms for 60-in. gate valves, motor driven	2,129.00	2,236.00	2,150.00	1,000.00	1,878.75
4 operating mechanisms for 60-in. gate valves, mounted on valves, motor driven	1,688.00	1,863.00	1,825.00	500.00	1,469.00
4 operating mechanisms for 60-in. gate valves, mounted on valves, gang driven	862.00	850.00	1,000.00	500.00	803.00
2 hydraulic cylinders	2,558.00	2,200.00	3,050.00	1,000.00	2,202.00
2 sets drive-shafting in the upper gate-chamber at Ashokan reservoir	3,683.00	1,300.00	4,300.00	2,000.00	2,820.75
1 set drive-shafting in the lower gate-chamber at Ashokan reservoir	582.00	720.00	750.00	1,000.00	763.00
1 set operating equipment for Croton Lake siphon	2,975.00	2,400.00	4,000.00	2,500.00	2,968.75
Totals	$151,749	$165,000	$166,250	$181,500	.....

Bond required, $90,000. Time, 24 months.

WATER SUPPLY.—City of Manila, P. I.—Bids were received by H. L. Fischer, Secy. of the Municipal Board, from (A) S. D. Hayden; (B) American Hardware & Plumbing Co.; (C) Delmar W. Smith; (D) Atlantic Gulf & Pacific Co., of Manila. The pipe and hydrants were furnished by the city. The following itemized prices are in pesos and centaros. One pesos is worth 50 cts. in United States gold:

	A	B	C	D
51,000 cu. meters earth excavation	1.70	1.15	2.15	1.73
700 cu. meters Portland cement concrete, 1:3:6	30.30	31.20	28.00	21.50
300 cu. meters brick masonry	30.00	38.00	38.00	28.00
200 metric tons riprap	8.00	4.70	4.00	3.70
1,000 lin. meters laying 4-in. c.-i. pipe	.65	1.00	.80	.65
1,000 lin. meters laying 5-in. c.-i. pipe	.78	1.10	1.00	.70
24,500 lin. meters laying 6-in. c.-i. pipe	.98	1.40	1.15	.82
3,200 lin. meters laying 8-in. c.-i. pipe	1.37	1.75	1.40	1.15
2,400 lin. meters laying 10-in. c.-i. pipe	1.72	1.95	1.75	1.40
5,500 lin. meters laying 12-in. c.-i. pipe	2.08	2.20	2.10	1.55
20 lin. meters laying 14-in. c.-i. pipe	2.70	2.40	2.60	1.85
4,140 lin. meters laying 16-in. c.-i. pipe	2.89	2.60	3.00	2.15
30 lin. meters laying 18-in. c.-i. pipe	3.70	2.90	3.50	2.50
1,430 lin. meters laying 20-in. c.-i. pipe	3.81	3.30	4.00	2.90
40 lin. meters laying 22-in. c.-i. pipe	5.00	3.75	4.10	3.35
40 lin. meters laying 26-in. c.-i. pipe	6.20	5.27	5.00	4.25
1,500 lin. meters laying 30-in. c.-i. pipe	6.39	6.20	6.00	5.20
1,570 lin. meters laying 36-in. c.-i. pipe	9.06	9.50	10.70	6.60
2,860 lin. meters laying 42-in. c.-i. pipe	11.00	12.50	13.00	9.50
150 lin. m. laying 20" flex. j. p. across Pasig River	184.00	125.00	120.00	80.00
275 installation post fire-hydrants	10.00	5.50	10.00	4.00
50 installation flush fire hydrants	8.00	6.50	10.00	4.00
1,000 cu. meters gravel for foundations	5.00	4.00	4.00	5.00
Totals	273,522	252,690	299,085	226,989

CRIBWORK, ETC.—New York, N. Y.—Bids were received by the Park Board on March 10 for rebuilding cribwork and filling in bank on the easterly side of the Harlem River, in Macombs Dam Park, Boro. of the Bronx. The bidders were: (A) Fox, Hennessy Co., 81 E. 125th St., New York; (B) GODWIN CONSTRUCTION CO., 30 Church St., New York (awarded contract); (C) The New York State Construction Co., 78 Broad St., New York; (D) Thos. O'Connor, 633 Second St., Brooklyn, N. Y.; (E) John F. O'Heir, 3052 Perry Ave., Bronx, New York; (F) Grant Rohrer, 299 Broadway, New York. Itemized bids are as follows:

	A	B	C	D	E	F
12,000 lin. ft. piling	$0.40	$0.30	$0.44	$0.35	$0.30	$0.30
5,500 lin. ft. round timber	.05	.15	.15	.13	.10	.20
26 M. ft. squared yellow pine	50.00	65.00	55.00	48.00	40.00	50.00
16,000 lbs. bolts, collars, rods and spikes	.06	.06	.06	.05	.06	.07
1,800 cu. yds. rip-rap, in place	.50	.50	.85	.60	.80	.50
3,200 cu. yds. cinder fill	.25	.25	.35	.36	.40	.34
Total	$9,035	$8,775	$11,145	$9,195	$8,870	$9,108

SEWERS.—Albany, N. Y.—Bids were received by the Board of Contract and Supply on March 21, for constructing a concrete sewer through the sunken meadows north of Western Ave. Isidore Wachsman is Secy. of the Bd.; Walter Mellus is City Engr. The bidders were: (A) John M. Holler, Albany; (B) Kennedy & Easton Construction Co., Albany; (C) John Doyle, Albany; (D) Bruno & Pettiti, Boston, Mass.; (E) T. Henry Dumary, Albany; (F) Michael F. Dollard, Albany; (G) James H. Malcolm, Albany. The itemized bids were as follows:

	A	B	C	D	E	F	G
5,000 cu. yds. excavation	$0.75	$1.30	$0.38	$1.25	$0.32	$0.50	$0.48
2,500 cu. yds. filling	.50	.90	.35	.90	.60	.60	.70
1,550 cu. yds. concrete	8.00	7.40	6.80	10.90	7.00	9.90	9.50
2,000 lbs. steel reinforcing	.05	.06	.02½	.06	.04	.08	.02½
78 cu. yds. vitrified brk. masonry	15.00	15.00	17.00	22.00	14.00	16.00	15.00
5 manhole covers	10.00	12.50	12.00	10.00	12.00	9.00	10.00
4 lin. ft. 36-in. tile pipe	4.00	5.00	5.50	5.00	4.75	5.00	5.10
34 lin. ft. 30-in. tile pipe	3.00	4.00	4.00	4.00	3.75	3.75	4.50
6 lin. ft. 24-in. tile pipe	2.00	2.50	2.80	2.00	2.00	2.50	2.10
2 lin. ft. 12-in. tile pipe	.50	1.00	1.20	1.00	.50	1.00	.50
150 lin. ft. 6-in. tile pipe	.30	.50	.60	.50	.14	.35	.20
Total	$19,246	$22,470	$15,418	$28,026	$15,862	$21,315	$20,612
Days to complete at $5 per day	70	30	80	100	100	60	50

LOCK GATES.—Dams Nos. 8 and 11, Ohio River.—Bids were received March 21 by Capt. F. W. Allstaetter, Corps Engrs., U. S. A., for furnishing and erecting steel lock gates and lock-operating mechanism for the two dams. The specifications for the two pieces of work were identical and the bids were the same. The bidders were: (A) Penn Bridge Co., Beaver Falls, Pa.; (B) G. & W. Mfg. Co., New York, N. Y.; (C) James J. Walker Co., Pittsburg, Pa.; (D) New Jersey Foundry & Machine Co., New York, N. Y.; (E) Independent Bridge Co., Pittsburg, Pa.; (F) J. & J. B. Milholland Co., Pittsburg, Pa.; (G) The Richard Mfg. Co., Bloomsburg, Pa. The itemized bids were as follows:

	A	B	C	D	E	F	G
Dam No. 8 or Dam No. 11.							
Lot A.							
447,000 lbs. structural steel	$0.0533	$0.0595	.....	$0.0536	$0.0474	.....	.....
158,300 lbs. mechanical parts	.089	.0798	.....	.0969	.0732	.....	.....
18 M. ft. oak timber	49.00	63.00	.....	60.00	65.00	.....	.....
2 M. ft. hemlock or pine timber	70.00	65.00	.....	35.00	55.00	.....	.....
Total	$38,967.30	$40,451.69	.....	$40,481.97	$34,093.36	.....	.....
Lot B.							
18 gate jacks	$133.00	$223.00	$153.00	$115.00	.....	$133.00	$120.00
16 river-wall jacks	112.00	223.00	144.00	130.00	.....	112.00	140.00
2 gate winches, etc.	2,422.00	2,200.00	2,433.00	2,055.00	.....	2,422.00	3,300.00
2 tanks, 100-gal.	80.00	50.00	48.00	70.00	.....	80.00	80.00
2 tanks, 150-gal.	95.00	75.00	60.00	82.00	.....	95.00	115.00
12 ft. ¾-in. pipe	1.35	.40	.40	.15	.....	1.35	.08
200 ft. 1-in. pipe	1.25	.50	.45	.24	.....	1.25	.11
1,325 ft. 1½-in. pipe	.70	.69	.50	.27	.....	.70	.18
20 ft. 3-in. pipe	1.50	3.00	1.15	.75	.....	1.50	.50
2 drip pockets	12.00	15.00	12.60	5.50	.....	12.00	12.00
Total	$11,450.21	$14,195.50	$11,692.08	$9,841.53	.....	$11,499.21	$12,228.51

INDUSTRIAL NOTES.

ANNOUNCEMENT IS MADE that the International Steel Tie Co. will, in the near future, build a new plant in Chicago to take care of its Western business.

THE CLINCHFIELD PORTLAND CEMENT CO. has erected a new plant at Kingsport, Tenn., and has placed contracts for two 8 x 125-ft. rotary kilns, three 6 x 60-ft. dryers, also crushers, elevators and other apparatus. Contracts have also been let for two steam turbines and generators, each of 750-KW. capacity.

THE HAMBURG-AMERICAN LINE will, according to a statement made by the resident director, begin a direct steerage passenger service between Hamburg and New Orleans some time in May. The fare to that port will be the same as to New York. The large employers of labor in the South have been agitating such a movement for several years.

A TWIN SCREW TRAILING suction hopper dredge has recently been launched in England for the Argentine Government. This vessel has pumps capable of raising and discharging 6,000 tons of material hourly. A steam hoist gear is provided for controlling the lower end of the suction frame and a complete electric lighting equipment will be installed.

A NEW SOURCE OF LUMBER SUPPLY will be developed with the opening of the Panama Canal. California capitalists have recently purchased a tract of approximately 100,000 acres on the Bayano River, about 30 miles south of Panama. The price paid for this tract is reported to be only $125,000 and the land is said to be especially rich in timber.

THE CANTON BOILER & ENGINEERING CO., Canton, Ohio, has recently been awarded the contract for ten 60-ton capacity steel ladles by the Cambria Steel Co., Johnstown, Pa. This makes 17 ladles of this size the Canton Boiler & Engineering Co. have received orders for this year. They are prepared to build ladles of this style up to 100 tons capacity.

A GAS PRODUCER PLANT of 300-HP. driving a 175-KW. direct current generator will furnish power for the new factory of Stanley G. Flagg & Co., Stowe, Pa. The engine, a horizontal double-acting Westinghouse producer gas type, develops this power by brake test. The gas, derived from anthracite coal, has a heat value of 125 B.T.U. per cubic foot.

TRAFFIC THROUGH THE SUEZ CANAL in 1909 was carried by 4,239 vessels with a gross tonnage of 21,500,874 tons. The number of vessels increased about 10% compared with the previous year, while the gain in tonnage was 1,500,000 tons. The tonnage under the British flag amounted to about 60% of the total, while that carried by vessels under the American flag was less than 1 per cent.

PETTERSON & SCHMIDT, engineering contractors, have opened an office in the Pacific Electric Building, Los Angeles, Cal. The new firm is composed of H. A. Petterson, for three years doing field work for the Los Angeles aqueduct project, and A. A. Schmidt, who leaves the city water department, where he has served some time. Especial attention will be devoted to concrete work of all descriptions.

CASTINGS OF ANY SIZE and in any metal can now be furnished by the Wiener Machinery Co., 50 Church St., New York City. This statement appears to be a particularly broad one, but the company is able to make it because of the important connection it has with foundries doing work of large size. The company is the New York agent for the Hubley Mfg. Co., Lancaster, Pa., and now represents the Valley Foundry Co., Canal Dover, Ohio. For castings of brass and other metals it secures its work from Clum & Atkinson, Rochester, N. Y.

AN ELECTRICAL EXHIBITION will be held in Dordrecht, Netherlands, April 30 to May 16. The exhibition will embrace all materials and appliances connected with electricity for lighting, heating and industrial purposes. All articles intended for the exhibition will be allowed to enter free of duty unless eventually sold, and special facilities will be afforded by the Dutch railway companies regarding freight charges, etc. Exhibits must reach Dordrecht between April 15 and 25, and must be installed before 6 p. m., April 27. Electric current will be supplied to exhibitors free of cost. Inquiries concerning this exhibition should be sent to the "Secretaris der Technische sub-Commissie der Tentoonstelling van Electriciteit, Steegoversloot 37," Dordrecht.

TRADE PUBLICATIONS.

LOCOMOTIVE CRANES.—Vulcan Steam Shovel Co., Toledo, Ohio. Paper; 9 x 6 ins.; pp. 16; illustrated.

A general description of Vulcan locomotive cranes occupies the first 8 pp., and is followed by "partial specifications" for a 10-20-ton and a 13-25-ton crane.

AIR WASHERS AND HUMIDIFIERS.—Warren Webster & Co., Camden, N. J. Paper; 4 x 9 ins.; pp. 8; illustrated.

The Webster humidifier is briefly described in this leaflet. It is announced that this company during its one year of operation has installed 40 air-washing plants.

WIRE ROPE AND FITTINGS.—American Steel & Wire Co., 30 Church St., New York City. Paper; 5¼ x 7½ ins.; pp. 75; illustrated.

This is a price-list of steel ropes, reels and fittings. There are directions for splicing wire ropes and tables of tensile strength and power transmitted for the different rope sizes.

MACHINERY FOR STRUCTURAL SHOPS.—Wiener Machinery Co., 50 Church St., New York City. Paper; 4 x 9 ins.; pp. 8; illustrated.

"S. & N." beam shears are shown here of the heavy duty, rapid, open throat and portable (hand-power) types. There are also double angle shears for cutting angles and tees.

DRAWING MATERIALS AND SURVEYING INSTRUMENTS.—B. K. Elliott Co., Pittsburg, Pa. Stiff paper; 6 x 9 ins.; pp. 248; illustrated.

A complete line of blue-print, drawing and tracing papers, drawing instruments, transits and levels and miscellaneous supplies for surveyors and draftsmen is described in this catalog.

ASBESTOS "WOOD."—H. W. Johns-Manville Co., 100 William St., New York City. Paper; 3½ x 6 ins.; pp. 12; illustrated.

Transite asbestos wood, described in this booklet, is made from asbestos fiber and binding cements. It is said to have the same physical characteristics as ordinary wood, except that it is harder and takes a higher polish.

CORLISS ENGINES.—Murray Iron Works Co., Burlington, Iowa. Catalog No. 65. Paper; 11 x 8 ins.; pp. 84; illustrated.

Simple Corliss engines of sizes up to 30 x 48 ins. are shown in this catalog. There are good line cut illustrations of pistons, cross-heads, connecting rods and other engine details, together with tables of principal dimensions and weights for both the standard and rolling-mill types.

AIR COMPRESSORS.—Union Steam Pump Co., Battle Creek, Mich. Catalog B. Paper; 6 x 9 ins.; pp. 72; illustrated.

Assembled compressors and separate parts are shown in the half-tone illustrations. A few pages are devoted to the air-lift system of raising water. There are tables of principal compressor dimensions and of useful information relating to the use of compressed air.

CENTRAL STATION HEATING.—American District Steam Co., 1101 Elm St., Lockport, N. Y. Bulletin No. 116. Paper; 6 x 9 ins.; no illustrations.

This is a reprint of a paper by Chas. R. Bishop, M. Am. Soc. M. E., read before the New England section of the National Electric Light Association at Portsmouth, N. H., Sept. 9-10, 1909. The full title of the paper is "The Advantages of Central Station Heating to Electric Companies."

RECORDING PRESSURE GAGES.—Crosby Steam Gage & Valve Co., New York City. Paper; 5⅝ x 8½ ins.; pp. 11; illustrated.

This is a folded paper cover containing eleven separate plates showing various styles and features of Crosby recording gages. A short explanatory paragraph is printed at the bottom of each plate. In many of the illustrations the dials are cut away so that the interior mechanism is shown. Plate X. shows a recording revolution counter which gives chart records of engine speed.

FEED WATER FILTRATION.—James Beggs & Co., 109 Liberty St., New York City. Catalog No. 35. Paper; 6 x 9 ins.; pp. 32; illustrated.

This book explains how oil, dirt, etc., get into feed water, what damage they do within the boilers and how to remove such impurities before this can occur. It tells how water of condensation and returns from heating systems may safely be used to cut down the coal and water bills and it explains the advantages and disadvantages of various methods of filtration. Numerous instances are cited where filtration through terry cloth at the last point in the line before water enters the boilers has proven successful after other methods have failed. The Blackburn-Smith feed water filter and grease extractor is described in detail.

PLASTER HOLLOW TILE.—United States Gypsum Co., 1170 Broadway, New York City. Paper; 6 x 8 ins.; pp. 40; illustrated.

The tile described in this catalog is made up "of the highest grade calcined gypsum that the purest rock and the most expert treatment can produce," according to the book itself. It is made in the shape of the ordinary book style, with small cylindrical interior openings, and has the advantage of being very light, easily sawed to required lengths and quite fireproof.

WATER-WORKS EQUIPMENT. — Water Works Equipment Co., 50 Church St., New York City. 1910 Catalog. Paper; 9 x 6 ins.; pp. 56; illustrated.

This catalog shows tapping machines, an "aquaphone" for detecting leaks (it resembles a telephone receiver with a projecting spike at the small end to be placed against the suspected pipe or valve), emergency sleeves, pipe jointers and cutters, valves, portable pumping outfits, lead wool for caulking pipe joints, and a portable thawing apparatus.

TAPES, RODS AND TARGETS.—Chicago Steel Tape Co., 6229 Cottage Grove Ave., Chicago, Ill. Paper; 5½ x 7¼ ins.; pp. 32; illustrated.

This is an illustrated descriptive catalog and price list of steel tapes and tape reels, leveling and stadia rods, targets and ribbons for rods, surveyors' marking arrows and lining poles, etc. The targets and other appliances are printed in red and black to show the distinctive arrangement of coloring. The Eureka splice for broken tapes is included also.

LIST OF CONTRACTS PENDING.

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SEWER.

OFFICE OF THE COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY.
(Incorporated.)

Sealed proposals for the construction of 15th Street and 23d Street Sewers, Contract No. 65, of the Comprehensive System of Sewerage for the City of Louisville, Ky., will be received at the office of the Commissioners of Sewerage until 12 o'clock noon, April 15th, 1910.

The work will consist mainly of building about 1,049 feet of sewer, 54", 48" and 45" in diameter, depth of cut 6 ft. to 33 ft., and including about 440 cu. yds. of concrete and 30 sq. yds. of vitrified brick paving.

Plans and specifications may be seen at the office of the Commissioners and at the office of Harrison P. Eddy, 14 Beacon St., Boston, Mass.

Sealed bids should be endorsed "Proposals for 15th and 23d Street Sewers," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "Bidder's Bond" as described in the form of proposal.

P. L. ATHERTON,
Chairman.
CHAS. P. WEAVER, Secy. & Treas.
J. B. F. BREED, Chief Engineer.

BRIDGE.

OFFICE OF THE BOARD OF CONTRACT AND SUPPLY.

Syracuse, N. Y., March 29th, 1910.

Sealed proposals will be received at the office of the Board of Contract and Supply until 1.30 P. M., Monday, April 11th, 1910, for constructing a reinforced concrete arch bridge over Onondaga Creek at Dickerson St., in the City of Syracuse, N. Y., in accordance with the plans and specifications on file in the office of the City Engineer. A certified check for 5% of the total amount of each proposal, payable to the order of Deforest Settle, City Treasurer, to be forfeited upon failure to enter into contract within five days' notice of award from the Secretary of this Board, must accompany each proposal.

JOHN J. HALLORAN,
Secretary.

Estimated cost, $11,000.

ASPHALT PAVEMENT.

Aurora, Illinois.

Sealed bids will be received until 2 o'clock, April 4th, 1910, by the Board of Local Improvements, for constructing Benton Street and Walnut Street Improvements.

Estimated Quantities—27,000 yds. Sheet Asphalt Pavement; 2,150 yds. Brick Pavement; 17,640 ft. Concrete Curb and Gutter.

MYRON J. TARBLE,
City Engineer.

Situations Open

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